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L1

L6

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(FILE 'HOME' ENTERED AT 13:49:56 ON 08 MAR 2007)

FILE 'STNGUIDE' ENTERED AT 13:50:08 ON 08 MAR 2007

FILE 'REGISTRY' ENTERED AT 13:50:25 ON 08 MAR 2007

STRUCTURE UPLOADED

2 SEA SSS SAM L1 L2

D SCAN

759 SEA SSS FUL L1 L3

STRUCTURE UPLOADED L4

L5 O SEA SSS SAM L4

. 38 SEA SSS FUL L4

STRUCTURE UPLOADED

O SEA SSS SAM L7 L8

L9 4 SEA SSS FUL L7

FILE 'CAPLUS' ENTERED AT 14:03:15 ON 08 MAR 2007

L10 2 SEA L9

D IBIB AB HITSTR 1-2

FILE 'MARPAT' ENTERED AT 14:07:20 ON 08 MAR 2007

17 SEA SSS FUL L7 T.11 L12

16 SEA L11 NOT L10

D IBIB AB FQHIT 1-16

FILE HOME

FILE STNGUIDE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Mar 2, 2007 (20070302/UP).

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

7 MAR 2007 HIGHEST RN 925547-09-7 STRUCTURE FILE UPDATES: HIGHEST RN 925547-09-7 DICTIONARY FILE UPDATES: 7 MAR 2007

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

FILE CAPLUS

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http://www.cas.org/infopolicy.html

FILE MARPAT

FILE CONTENT: 1961-PRESENT VOL 146 ISS 10 (20070302/ED)

SOME MARPAT RECORDS ARE DERIVED FROM INPI DATA FOR 1961-1987

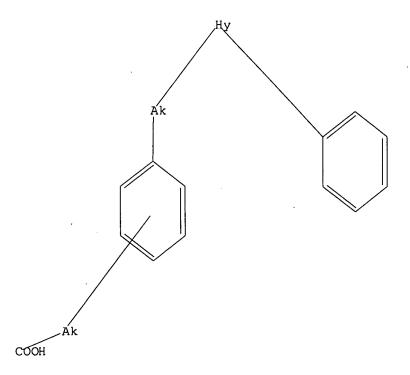
MOST RECENT CITATIONS FOR PATENTS FROM MAJOR ISSUING AGENCIES (COVERAGE TO THESE DATES IS NOT COMPLETE):

US 2007010679 11 JAN 2007
DE 102005032332 11 JAN 2007
EP 1741773 10 JAN 2007
JP 2007008814 18 JAN 2007
WO 2007007938 18 JAN 2007
GB 2427406 27 DEC 2006
FR 2888248 12 JAN 2007
RU 2291880 20 JAN 2007
CA 2551930 08 JAN 2007

Expanded G-group definition display now available.

=> d que stat

L7 STR



Structure attributes must be viewed using STN Express query preparation.
L9 4 SEA FILE=REGISTRY SSS FUL L7

L10 2 SEA FILE=CAPLUS L9
L11 17 SEA FILE=MARPAT SSS FUL L7
L12 16 SEA FILE=MARPAT L11 NOT L10

L10 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:56568 CAPLUS

DOCUMENT NUMBER: 140:402224

TITLE: Detergents profoundly affect inhibitor potencies

against both cyclo-oxygenase isoforms

AUTHOR(S): Ouellet, Marc; Falgueyret, Jean-Pierre; Percival, M.

David

CORPORATE SOURCE: Department of Biochemistry and Molecular Biology,

Merck Frosst Centre for Therapeutic Research,

Pointe-Claire-Dorval, QC, 1005, Can.

SOURCE: Biochemical Journal (2004), 377(3), 675-684

CODEN: BIJOAK; ISSN: 0264-6021

PUBLISHER: Portland Press Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

The sensitivity of Coxs (cyclo-oxygenases) to inhibition is known to be highly dependent on assay conditions. In the present study, the inhibitor sensitivities of purified Cox-1 and -2 were determined in a colorimetric assay using the reducing agent N, N, N', N'-tetramethyl-p-phenylenediamine (TMPD). With the detergent genapol X-100 (2 mM) present, the potencies of nimesulide, ibuprofen, flufenamic acid, niflumic acid and naproxen were increased over 100-fold against Cox-2 and titration curve shapes changed, so that maximal inhibition now approached 100%. Indomethacin, diclofenac and flosulide were not changed in potency. Similar effects of genapol were observed with inhibitors of Cox-1. DuP-697 and two analogs became more than 10-fold less potent against Cox-2 with genapol present. Tween-20, Triton X-100 and phosphatidylcholine, but not octylglucoside, gave qual. similar effects as genapol. Similar detergent-dependent changes in inhibitor potency were also observed using a [14C] arachidonic acid HPLC assay. increases in potency of ibuprofen, flufenamic acid, isoxicam and niflumic acid towards Cox-2 and ibuprofen towards Cox-1 were accompanied by a change from time-independent to time-dependent inhibition. interactions of Cox inhibitors has been described in terms of multiple binding step mechanisms. The genapol-dependent increase in inhibitor potency for ketoprofen was associated with an increase in the rate constant for the conversion of the initial enzyme-inhibitor complex to a second, more tightly bound form. The loss of potency for some inhibitors is probably due to inhibitor partitioning into detergent micelles. The present study identifies detergents as another factor that must be considered when determining

inhibitor potencies against both Cox isoforms.

IT 690657-94-4, Biaryl A

RL: BSU (Biological study, unclassified); BIOL (Biological study) (Cox inhibitor; detergent effects on inhibitor potencies against cyclooxygenase isoforms)

RN 690657-94-4 CAPLUS

CN Benzeneacetic acid, 4-[6-[5-(4-fluorophenyl)-4-[4-(methylsulfonyl)phenyl]-2-thienyl]hexyl]- (9CI) (CA INDEX NAME)

L10 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:888731 CAPLUS

DOCUMENT NUMBER: 137:384743

TITLE: Preparation of furan and thiophene derivatives that

activate human peroxisome proliferator activated

APPLICATION NO.

DATE

receptors

INVENTOR(S): Beswick, Paul John; Hamlett, Christopher Charles

DATE

Frederick; Patel, Vipulkumar; Sierra, Michael

Lawrence; Ramsden, Nigel Grahame

PATENT ASSIGNEE(S): Glaxo Group Limited, UK

SOURCE: PCT Int. Appl., 141 pp. CODEN: PIXXD2

KIND

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

L'W1	TAILNI NO.					•	D111 L											
WO	2002	0925	90		A1	-	2002	1121		WO	2002-	-GB21	 52		2	0020	509	
	W:	AE,	AG,	AL,	AM,	AT,	AU,	ΑŻ,	BA,	BE	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
		co.	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC	E, EE,	ES,	FI,	GB,	GD,	GE,	GH,	
		GM.	HR.	HU.	ID,	IL,	IN,	IS,	JP,	KE	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,	
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN	, MW,	MX,	ΜZ,	NO,	NZ,	OM,	PH,	
		PL,	PT.	RO,	RU,	SD,	SE,	SG,	SI,	Sk	, SL	TJ,	TM,	TN,	TR,	TT,	ΤZ,	
							YU,											
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ	Z, TZ,	UG,	ZM,	ZW,	ΑT,	ΒE,	CH,	
		CY.	DE.	DK,	ES,	FI,	FR,	GB,	GR,	ΙE	., IT,	LU,	MC,	NL,	PT,	SE,	TR,	
		BF.	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GΩ), GW	, ML,	MR,	ΝE,	SN,	TD,	ΤG	
CA	2446	797			A1		2002	1121		CA	2002	-2446	797		2	0020	509	
ΕP	1392	674			A1		2004	0303		EΡ	2002	-7225	06		2	0020	509	
ΕP	1392	674			B1		2005	0810					٠					
	R:	AT,	BE,	CH,	DE,	DK,	, ES,	FR,	GB,	GF	R, IT	, LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	SI,	LT,	LV,	FΙ,	, RO,	MK,	CY,	ΑI	L, TR							
HU	2003	0405	1		A2			0428		HU	2003	-4051			2	0020		
CN	1507	442			Α		2004	0623		CN	2002	-8096	94			0020		
BR	2002	0094	68		Α		2004	0803		BR	2002	-9468			2	0020		
JP	2002 2004 3016 2247	5340	35		T		2004				2002					0020		
ΑT	3016	49			${f T}$		2005				2002				_	0020		
ES	2247	322			Т3		2006	0301			2002		-		_	0020		
ΙN	2003	KN01						0317		ΙN	2003	-KN12	87			0031		
ZA	2003	0083			Α			0127			2003							
	2003				Α			1110		NO	2003	-4986			2	0031		
	2004		90		A1			0812		US	2004	-4761	94		2	0040	323	
	7091				В2		2006	0815					_		- ^	0010	F 1 1	
RIT	YAPP	LN.	INFO	.:											A 200105			
										WO	2002	-GB21	52		W 2	0020	509	
D C	SOURCE (S) ·					MARPAT 137:3847												

OTHER SOURCE(S): MARPAT 137:384743

The title compds. [I; X1 = O, S, NH, NMe, alkyl; R1, R2 = H, alkyl; R3-R5 = H, Me, OMe, CF3, halo; m = 0-3; X2 = (CR10R11)n, O, S, OCH2; n = 1-2; R6, R7, R10, R11 = H, F, alkyl, etc.; one of Y and Z = CH, the other = S, O with the proviso that Y cannot be substituted and Z can only be substituted when it is carbon; R8 = (un)substituted Ph, pyridyl (wherein the N is in position 2 or 3) with the provision that when R3 = pyridyl, the N is unsubstituted; R9 = alkyl, CF3, CH2D (D = N-substituted piperazino, furyl, piperidino, etc.); R26, R27 = H, alkyl; or R26 and R27, together with the carbon atom to which they are bonded form a 3-5 membered cycloalkyl ring] and their pharmaceutically acceptable salts, useful for the treatment of a hPPAR mediated disease or condition such as dyslipidemia, syndrome X, heart failure, hypercholesteremia,

cardiovascular disease, type II diabetes mellitus, type I diabetes, insulin resistance, hyperlipidemia, obesity, anorexia bulimia, inflammation and anorexia nervosa, were prepared Thus, coupling {5-[4-(trilfuoromethyl)phenyl]-3-furyl}methanol with Et (4-mercapto-2-methylphenoxy)acetate followed by hydrolysis of the resulting ester afforded the acid II.

IT 476154-70-8P 476154-73-1P 476156-40-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of furan and thiophene derivs. that activate human peroxisome proliferator activated receptors)

RN 476154-70-8 CAPLUS

CN

Benzenepropanoic acid, 4-[2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethyl]- (9CI) (CA INDEX NAME)

F3C
$$CH_2-CH_2-CO_2H$$
 Me

RN 476154-73-1 CAPLUS

CN Benzenepropanoic acid, 2-methyl-4-[2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethyl]- (9CI) (CA INDEX NAME)

F₃C
$$CH_2-CH_2$$
 $CH_2-CH_2-CO_2H$ CH_2-CH_2

RN 476156-40-8 CAPLUS

CN Benzenebutanoic acid, 2-methyl-4-[2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethyl]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

(Uses)

(preparation of indane acetic acid derivs. for treating diabetes, obesity, hyperlipidemia, and atherosclerotic diseases)

496062-92-1 HCAPLUS RN

1H-Indene-1-acetic acid, 5-[2-[2-[4-(5-acetyl-2-thienyl)phenyl]-5-methyl-4-CN oxazolyl]ethoxy]-2,3-dihydro- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 23 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2002:888731 HCAPLUS Full-text

DOCUMENT NUMBER:

137:384743

TITLE:

Preparation of furan and thiophene derivatives that

activate human peroxisome proliferator activated

receptors

INVENTOR(S):

Beswick, Paul John; Hamlett, Christopher Charles Frederick; Patel, Vipulkumar; Sierra, Michael

Lawrence; Ramsden, Nigel Grahame

PATENT ASSIGNEE(S):

SOURCE:

Glaxo Group Limited, UK

PCT Int. Appl., 141 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	PENT	NO.			KIN) 1	DATE		i		ICAT		NO.		Di	ATE			
WO	2002	0925	90		A1	-	2002	1121	ļ				52		2	0020	509		
	W:	ΑE,	AG,	ΑĹ,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,		
		co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,		
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,		
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NO,	ΝZ,	OM,	PH,		
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		UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	zw									
	RW:	GH,	GM,	ΚE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	ΒĖ,	CH,		
		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,		
		BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG		
CA 2446797					A1		2002	1121		CA 2	002-	2446	797		- 2	0020	509		
ΕP	1392	674			A1		2004	0303		EP 2	002-	7225	06		2	0020	509		
ΕP	1392	674			В1		2005	0810											
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,		
		ΙE,	SI,	LT,	LV,			MK,											
HU	2003							0428											
CN	1507	442			Α		2004	0623		CN 2	002-		2	0020	509				
BR								20040803 BR 2002-9468								0020			
JP	JP 2004534035							1111					75						
	AT 301649 T						2005	0815											
ES							2006	0301		ES 2	002-	2722	506						
IN	2003	KN01					2006	0317				KN12	•		2				
ZA	2003	2003008352 A 20050127 · ZA 2003-83									8352			20031027					

NO 2003004986 20031110 NO 2003-4986 20031110 20040323 US 2004157890 A1 20040812 US 2004-476194 US 7091237 В2 20060815 PRIORITY APPLN. INFO.: A 20010511 GB 2001-11523 W 20020509 WO 2002-GB2152

OTHER SOURCE(S):

MARPAT 137:384743

GΙ

$$R^{3}$$
 R^{4} R^{6} R^{7} R^{5} R^{9} R^{8} R^{8} R^{8} R^{8} R^{8} R^{8} R^{9} R^{1}

$$HO_2C$$
 O Me S CF_3 II

The title compds. [I; X1 = O, S, NH, NMe, alkyl; R1, R2 = H, alkyl; R3-R5 = H, AB Me, OMe, CF3, halo; m = 0-3; X2 = (CR10R11)n, O, S, OCH2; n = 1-2; R6, R7, R10, R11 = H, F, alkyl, etc.; one of Y and Z = CH, the other = S, O with the proviso that Y cannot be substituted and Z can only be substituted when it is carbon; R8 = (un) substituted Ph, pyridyl (wherein the N is in position 2 or 3) with the provision that when R3 = pyridyl, the N is unsubstituted; R9 = alkyl, CF3, CH2D (D = N-substituted piperazino, furyl, piperidino, etc.); R26, R27 = H, alkyl; or R26 and R27, together with the carbon atom to which they are bonded form a 3-5 membered cycloalkyl ring] and their pharmaceutically acceptable salts, useful for the treatment of a hPPAR mediated disease or condition such as dyslipidemia, syndrome X, heart failure, hypercholesteremia, cardiovascular disease, type II diabetes mellitus, type I diabetes, insulin resistance, hyperlipidemia, obesity, anorexia bulimia, inflammation and anorexia nervosa, were prepared Thus, coupling {5-[4-(trilfuoromethyl)phenyl]-3-furyl}methanol with Et (4-mercapto-2methylphenoxy) acetate followed by hydrolysis of the resulting ester afforded the acid II.

TT 476154-11-7P 476154-12-8P 476154-13-9P
476154-14-0P 476154-22-0P 476154-25-3P
476154-29-7P 476154-31-1P 476154-32-2P
476154-35-5P 476154-55-9P 476154-56-0P
476154-57-1P 476154-58-2P 476154-59-3P
476154-60-6P 476154-61-7P 476154-62-8P
476154-67-3P 476154-70-8P 476154-71-9P
476154-72-0P 476154-73-1P 476154-75-3P
476154-76-4P 476154-80-0P 476154-82-2P
476154-88-8P 476154-90-2P 476154-92-4P
476155-00-7P 476155-02-9P 476155-09-6P
476155-10-9P 476155-11-0P 476156-38-4P
476156-52-2P 476156-54-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of furan and thiophene derivs. that activate human peroxisome proliferator activated receptors)

RN 476154-11-7 HCAPLUS

CN Acetic acid, [2-methyl-4-[[[5-[4-(trifluoromethyl)phenyl]-3-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-12-8 HCAPLUS

CN Acetic acid, [2-methyl-4-[[[5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-13-9 HCAPLUS

CN Acetic acid, [2-methyl-4-[[[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-14-0 HCAPLUS

CN Acetic acid, [2-methyl-4-[[[2-methyl-5-[4-(trifluoromethyl)phenyl]-3-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-22-0 HCAPLUS

CN Acetic acid, [2-methyl-4-[[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methoxy]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-25-3 HCAPLUS

CN Acetic acid, [2-methyl-4-[[2-methyl-5-[4-(trifluoromethyl)phenyl]-3-thienyl]methoxy]phenoxy]- (9CI) (CA INDEX NAME)

F₃C
$$H_2$$
 H_2 H_2 H_3 H_4 H_5 H_5 H_6 H_6 H_6 H_7 H_8 H_8

RN 476154-29-7 HCAPLUS

CN Propanoic acid, 2-methyl-2-[2-methyl-4-[[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methoxy]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-31-1 HCAPLUS

CN Propanoic acid, 2-methyl-2-[2-methyl-4-[[2-methyl-5-[4-(trifluoromethyl)phenyl]-3-thienyl]methoxy]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-32-2 HCAPLUS

CN Benzenepropanoic acid, 4-[[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methoxy]- (9CI) (CA INDEX NAME)

RN 476154-35-5 HCAPLUS

CN Benzenepropanoic acid, 2-methyl-4-[[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methoxy]- (9CI) (CA INDEX NAME)

RN 476154-55-9 HCAPLUS

CN Acetic acid, [2-methyl-4-[[[3-[[(1-methylethyl)thio]methyl]-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

F3C
$$CH_2-S$$
 CH_2-S CH_2-S

RN 476154-56-0 HCAPLUS

CN Acetic acid, [2-methyl-4-[[[3-(phenoxymethyl)-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

F3C
$$CH_2-S$$
 CH_2-OPh

RN 476154-57-1 HCAPLUS

CN Acetic acid, [2-methyl-4-[[[3-[[(phenylmethyl)thio]methyl]-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

F₃C
$$CH_2-S$$
 CH_2-S Ph

RN 476154-58-2 HCAPLUS

CN Acetic acid, [2-methyl-4-[[[3-[[4-(trifluoromethyl)phenoxy]methyl]-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-59-3 HCAPLUS
CN Acetic acid, [2-methyl-4-[[[3-[[4-(2-phenylethyl)phenoxy]methyl]-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-60-6 HCAPLUS
CN Acetic acid, [2-methyl-4-[[[3-[[(4'-methyl[1,1'-biphenyl]-4-yl)oxy]methyl]-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-61-7 HCAPLUS

CN Acetic acid, [2-methyl-4-[[[3-[(methylphenylamino)methyl]-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-62-8 HCAPLUS

CN Acetic acid, [4-[[[3-ethyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]-2-methylphenoxy]- (9CI) (CA INDEX NAME)

RN 476154-67-3 HCAPLUS

CN Acetic acid, [2-methyl-4-[2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethyl]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-70-8 HCAPLUS

CN Benzenepropanoic acid, 4-[2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethyl]- (9CI) (CA INDEX NAME)

RN 476154-71-9 HCAPLUS

CN Acetic acid, [2-(1,1-dimethylethyl)-6-methyl-4-[2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethyl]phenoxy]- (9CI) (CA INDEX NAME)

F3C
$$CH_2-CH_2$$
 $O-CH_2-CO_2H$ Me

RN 476154-72-0 HCAPLUS

CN Acetic acid, [2,6-dimethyl-4-[2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethyl]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-73-1 HCAPLUS

CN Benzenepropanoic acid, 2-methyl-4-[2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethyl]- (9CI) (CA INDEX NAME)

RN 476154-75-3 HCAPLUS

CN Acetic acid, [2-methyl-4-[[3-methyl-5-[4-(trifluoromethoxy)phenyl]-2-thienyl]methoxy]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-76-4 HCAPLUS

CN Acetic acid, [2-methyl-4-[2-[5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethoxy]phenoxy]- (9CI) (CA INDEX NAME)

F3C
$$S$$
 CH_2-CH_2-O Me $O-CH_2-CO_2H$

RN 476154-80-0 HCAPLUS

CN Acetic acid, [4-[2-[5-(4-cyano-3-fluorophenyl)-3-methyl-2-thienyl]ethyl]-2-methylphenoxy]- (9CI) (CA INDEX NAME)

NC
$$S$$
 CH_2-CH_2 $O-CH_2-CO_2H$

RN 476154-82-2 HCAPLUS

CN Acetic acid, [4-[1,1-dimethyl-2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethyl]-2-methylphenoxy]- (9CI) (CA INDEX NAME)

RN 476154-88-8 HCAPLUS

CN Acetic acid, [2-methyl-4-[[[3-methyl-5-[4-(trifluoromethoxy)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-90-2 HCAPLUS

CN Acetic acid, [4-[[5-[2,5-difluoro-4-(trifluoromethyl)phenyl]-3-methyl-2-thienyl]methoxy]-2-methylphenoxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{HO}_2\text{C}-\text{CH}_2-\text{O} \end{array}$$

RN 476154-92-4 HCAPLUS

CN Acetic acid, [4-[[5-[2,3-difluoro-4-(trifluoromethyl)phenyl]-3-methyl-2-thienyl]methoxy]-2-methylphenoxy]- (9CI) (CA INDEX NAME)

RN 476154-94-6 HCAPLUS

CN Acetic acid, [4-[[5-[2-fluoro-4-(trifluoromethyl)phenyl]-3-methyl-2-thienyl]methoxy]-2-methylphenoxy]- (9CI) (CA INDEX NAME)

RN 476154-96-8 HCAPLUS
CN Acetic acid, [2-methyl-4-[1-[5-[4-(trifluoromethyl)phenyl]-3-thienyl]ethoxy]phenoxy]- (9CI) (CA INDEX NAME)

RN 476154-98-0 HCAPLUS
CN Acetic acid, [2-methyl-4-[phenyl[5-[4-(trifluoromethyl)phenyl]-3-thienyl]methoxy]phenoxy]- (9CI) (CA INDEX NAME)

RN 476155-00-7 HCAPLUS
CN Propanoic acid, 2-methyl-2-[2-methyl-4-[phenyl[5-[4-(trifluoromethyl)phenyl]-3-thienyl]methoxy]phenoxy]- (9CI) (CA INDEX NAME)

RN 476155-02-9 HCAPLUS

CN Acetic acid, [2-methyl-4-[1-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethoxy]phenoxy]- (9CI) (CA INDEX NAME)

RN 476155-09-6 HCAPLUS

CN Acetic acid, [2-methyl-4-[[3-[[(1-methylethyl)thio]methyl]-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methoxy]phenoxy]- (9CI) (CA INDEX NAME)

RN 476155-10-9 HCAPLUS

CN Acetic acid, [2-methyl-4-[[[5-[4-(trifluoromethyl)phenyl]-3-[(2,3,6-trimethylphenoxy)methyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

RN 476155-11-0 HCAPLUS

CN Acetic acid, [2-methyl-4-[[[3-[[[6-methyl-2-(1-methylethyl)-4-pyrimidinyl]oxy]methyl]-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

RN 476156-38-4 HCAPLUS

CN Acetic acid, [2-methyl-4-[[[3-methyl-4-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

RN 476156-52-2 HCAPLUS

CN Acetic acid, [2-methyl-4-[1-[5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethoxy]phenoxy]- (9CI) (CA INDEX NAME)

RN 476156-54-4 HCAPLUS

CN Acetic acid, [2-methyl-4-[[3-methyl-5-[4-(1,1,2-trifluoroethoxy)phenyl]-2-thienyl]methoxy]phenoxy]- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 24 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2002:575057 HCAPLUS Full-text

DOCUMENT NUMBER:

137:140514

TITLE:

Preparation of thiazole and oxazole derivatives as activators of human peroxisome proliferator activated

receptors

INVENTOR(S):

Banker, Pierette; Cadilla, Rodolfo; Lambert, Millard

Hurst, III; Rafferty, Stephen William; Sternbach,

Daniel David; Sznaidman, Marcos Luis

PATENT ASSIGNEE(S):

SOURCE:

Glaxo Group Limited, UK

PCT Int. Appl., 138 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

1

PATENT INFORMATION:

PAT	CENT	NO.			KIND					APPL:	ICAT:	ION 1	NO.		D2	ATE	
WO	2002	0590	98		A1	_	2002	0801	,	WO 2	001-	US51	056		20	0011	219
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		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	ΝZ,	OM,	PH,
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,
		UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZW								
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,	CH,
		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
EΡ	1349	843			A1		2003	1008		EP 2	001-	9945	14		21	0011	219
EΡ	1349	843	B1 200504									•					
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR						
	JP 2004520377									JP 2					2	0011	219
ΑT	2936	11			. T		2005	0515		AT 2	001-	9945	14		2	0011	219

[(isobutylamino)carbonyl]biphenyl-2-carboxylic acid hydrochloride was shown. One of I inhibited human factor VIIa/tissue factor complex at IC50 2.2 μM . 790230-67-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(preparation of benzoic acid derivs. having phenylcarbamoyl group via benzene or heterocyclic .ring as factor VIIa inhibitors)

RN790230-67-0 HCAPLUS Benzoic acid, 2-[3-[[[3-(aminocarbonyl)phenyl]amino]carbonyl]-2-thienyl]-5-CN [[(2-methylpropyl)amino]carbonyl]- (9CI) (CA INDEX NAME)

L13 ANSWER 14 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:878382 HCAPLUS Full-text

DOCUMENT NUMBER:

141:35016<u>1</u>

TITLE:

IT

Preparation of azole compounds as PTP1B inhibitors INVENTOR(S):

Ikemoto, Tomoyuki; Tanaka, Masahiro; Yuno, Takeo; Sakamoto, Johei; Nakanishi, Hiroyuki; Nakagawa, Yuichi; Ohta, Takeshi; Sakata, Shohei; Morinaga,

Hisayo

PATENT ASSIGNEE(S):

SOURCE:

Japan Tobacco Inc., Japan PCT Int. Appl., 542 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent Japanese

1

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	CENT	NO.			KIN	D	DATE		i	APPL	ICAT:	ION I	. O		Dž	ATE	
WO	2004	0899	18		A1	-	2004	1021	,	WO 2	004-	JP51:	 19		2	0040	409
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		CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE, GH, GM		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚĒ,	KG,	ΚP,	KR,	ΚZ,	LC,
		LK, LR, LS			LT,	LU,	LV,	MA,	ΜD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NA,	NI,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,
		BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,
		ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,
		SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,
TD, TG																	
וזמ	AU 2004228565				A1 20041			1021		AII 2	004-	2285	65		2	0040	409

CA	2521	830													0040	409		
EP	1553	091			A1	:	2005	0713	1	EP 2	2004-	7267	65		2	0040	409	
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		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	ΑL,	TR,	BG,	CZ,	EE,	ΗU,	PL,	SK,	HR
BR	2004	0091	36		Α	:	2006	0425	1	BR 2	2004-	9136			2	0040	409	
CN	1780	823			Α	:	2006	0531	(CN 2	2004-	8000	9487		2	0040	409	
JP	3819	415			В2		2006	0906		JP 2	2005-	5053	23		2	0040	409	
JP	2005	2724	76		Α		2005	1006		JP 2	2005-	1337	55		2	0050	428	
US	2006	1221	81		A1		2006	0608	1	US 2	2005-	1768	46	•	2	0050	707	
NO	2005	0052	4-6		Α		2005	1221	1	NO 2	2005-	5246			2	0051	108	
PRIORITY	Y APP	LN.	INFO	.:					,	JP 2	2003-	1052	67	i	A 2	0030	409	
										JP 2	2003-	1575	90		A 2	0030	603	
							•		,	JP 2	2005-	5053	23	;	A3 2	0040	409	
									1	WO 2	2004-	JP51	19	. 1	₩ 2	0040	409	

OTHER SOURCE(S):

MARPAT 141:350161

GI

$$R - \left\{L\right\} - \left\{CH2\right\} - X - \left\{\frac{R^1}{k^2}\right\} - W - \left\{\frac{R^3}{k^2}\right\} - \left(\frac{R^3}{k^2}\right) - \left(\frac{R^3}{k^2}\right)$$

Title compds. I [V = N, CH; W = S, O; m = 0-2; R1, R2 = H, alkyl; X = NR4, etc.; R4 = H, alkyl; n = 0-4; p = 0, 1; L = CR20R21, etc.; R20 = H, alkyl, etc.; R21 = H, alkyl, etc.; R = CO2R19, etc.; R19 = H, alkyl; B = aryl, heteroaryl; R3 = H, halo, etc.; Y = O, etc.; s = 0, 1; A = (un)substituted alkylene with cycloalkyl; Z = cycloalkyl, etc.] were prepared For example, O-alkylation of 5-hydroxynicotinic acid Me ester with compound II [Q = Cl], e.g., prepared from 4-bromoacetylbenzoic acid in 5 steps, followed by saponification afforded compound II [3-carboxypyridin-5-yloxy] in 44.1% overall yield. In PTP1B (protein tyrosine phosphatase 1B) inhibition assays, the IC50 value of compound II [Q = 3-carboxypyridin-5-yloxy] was 0.28 μ M. Compds. I are claimed useful for the treatment of obesity, diabetes, etc. Formulations are given.

IT 776311-53-6P 776311-54-7P 776311-55-8P 776311-56-9P 776311-57-0P 776311-58-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of azole compds. as PTP1B inhibitors for treatment of obesity and diabetes)

RN 776311-53-6 HCAPLUS

CN Benzoic acid, 4-[[(dimethylamino)acetyl]amino]-3-[[4-[4-[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methoxy]- (9CI) (CA INDEX NAME)

RN 776311-54-7 HCAPLUS

CN Benzoic acid, 4-[(2-methyl-1-oxopropyl)amino]-3-[[4-[4-[4-[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methoxy]- (9CI) (CA INDEX NAME)

RN 776311-55-8 HCAPLUS

CN Benzoic acid, 4-[[4-[4-[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methoxy]- (9CI) (CA INDEX NAME)

RN 776311-56-9 HCAPLUS

CN Benzoic acid, 4-[methyl(methylsulfonyl)amino]-3-[[4-[4-[4-[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methoxy]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

CH(Pr-n)2

RN 776311-57-0 HCAPLUS

CN

Benzoic acid, 4-[[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]thio]- (9CI) (CA INDEX NAME)

776311-58-1 HCAPLUS RN

Benzoic acid, 4-amino-3-[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-CN thienyl]methoxy]- (9CI) (CA INDEX NAME)

THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 16 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 15 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: DOCUMENT NUMBER:

2004:606464 HCAPLUS Full-text

141:140430

TITLE:

Preparation of fused heterocyclic derivatives as PPAR

modulators for treatment of diabetes mellitus,

syndrome X, and atherosclerosis

INVENTOR(S):

Conner, Scott Eugene; Knobelsdorg, James Allen; Mantlo, Nathan Bryan; Mayhugh, Daniel Ray; Wang,

Xiaodong; Zhu, Guoxin; Schkeryantz, Jeffrey Michael

PATENT ASSIGNEE(S):

Eli Lilly and Company, USA PCT Int. Appl., 234 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

RN 728038-97-9 HCAPLUS

CN Benzenepropanoic acid, 2-methyl-4-[1-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]butoxy]- (9CI) (CA INDEX NAME)

RN 728038-98-0 HCAPLUS

CN Benzenepropanoic acid, 2-methyl-4-[2-methyl-1-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]propoxy]- (9CI) (CA INDEX NAME)

RN 728038-99-1 HCAPLUS

CN Benzenepropanoic acid, 2-methyl-4-[1-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]-2-phenylethoxy]- (9CI) (CA INDEX NAME)

L13 ANSWER 17 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:412803 HCAPLUS Full-text

DOCUMENT NUMBER:

141:1264

TITLE:

Receptor function controlling agent

INVENTOR(S):

Fukatsu, Kohji; Sasaki, Shinobu; Hinuma, Shuji; Ito,

Yasuaki; Suzuki, Nobuhiro; Harada, Masataka; Yasuma,

Tsuneo

PATENT ASSIGNEE(S):

Takeda Chemical Industries, Ltd., Japan

SOURCE:

PCT Int. Appl., 442 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	PATENT NO.						KIND DATE				ICAT:		NO.		D2	ATE		
WO	2004	0412	66		A1		2004	0521	1				139		20	0031	106	
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		•			-	-	-	DM,										
								IN,										
								MG,										
		PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	TM,	TN,	
								UZ,										
	RW:	BW,																
								TM,										
								ΙE,										
		TR,	BF,					CM,										TG
	2505							0521							2			
	2003																	
	2005																	
EP	1559																	
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CN	1735	408			. A		2006	0215										
PRIORIT	Y APP	LN.	INFO	.:						JP 2	002-	3246	32					
										JP 2	003-	1688	9		A 2			
													86		A 2			
										WO 2	003-	JP14	139		W 2	0031	106	

OTHER SOURCE(S): MARPAT 141:1264

AB A GPR40 receptor function controlling agent which contains a compound having an aromatic ring and a group capable of releasing a cation and is useful as a insulin secretion promoting agent or a preventive/remedy for diabetes, etc.

IT 691904-71-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(GPR40 receptor function controlling agents as antidiabetics)

RN 691904-71-9 HCAPLUS

CN Benzenepropanoic acid, 4-[[5-(2,6-dimethylphenyl)-2-thienyl]methoxy](9CI) (CA INDEX NAME)

L13 ANSWER 18 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:181798 HCAPLUS Full-text

DOCUMENT NUMBER:

140:217508

TITLE:

Preparation of thiophenes as selective

10/540,330

=> d his ful

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L9
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L13
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                BRYAN"/AU)
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L16
                ZHU G ?/AU
              5 SEA ABB=ON PLU=ON L14 AND L15 AND L16
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             21 SEA ABB=ON PLU=ON L14 AND (L15 OR L16)
L18
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L20
              5 SEA ABB=ON PLU=ON L19 AND PPAR
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L21
                RECEPTORS"/CV
L22
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L23
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FILE HCAPLUS

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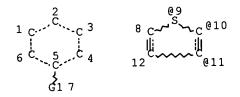
FILE COVERS 1907 - 13 Mar 2007 VOL 146 ISS 12 FILE LAST UPDATED: 12 Mar 2007 (20070312/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

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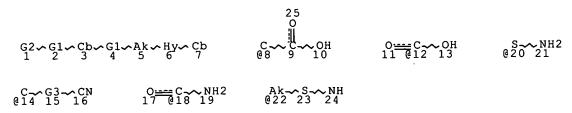
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STEREO ATTRIBUTES: NONE

L8 116215 SEA FILE=REGISTRY SSS FUL L6

L9 STR



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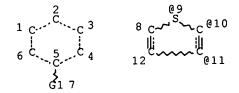
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RING(S) ARE ISOLATED OR EMBEDDED

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STEREO ATTRIBUTES: NONE

L11 STR



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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

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NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

L12 159 SEA FILE=REGISTRY SUB=L8 SSS FUL L9 AND L11

L13 32 SEA FILE=HCAPLUS ABB=ON PLU=ON L12

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L13 ANSWER 1 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:1272380 HCAPLUS Full-text

DOCUMENT NUMBER: 146:100309

TITLE: Insights into the mechanism of the site-selective

sequential palladium-catalyzed cross-coupling

reactions of dibromothiophenes/dibromothiazoles and

arylboronic acids. Synthesis of PPAR β/δ

agonists

AUTHOR(S): Pereira, Raquel; Furst, Audrey; Iglesias, Beatriz;

Germain, Pierre; Gronemeyer, Hinrich; de Lera, Angel

R.

CORPORATE SOURCE: Departamento de Quimica Organica, Universidade de

Vigo, Vigo, 36310, Spain

SOURCE: Organic & Biomolecular Chemistry (2006), 4(24),

4514-4525

CODEN: OBCRAK; ISSN: 1477-0520

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal LANGUAGE: English

AB A reactivity study, aided by NMR spectroscopy, allowed a mechanistic rationale

to be postulated for the palladium-catalyzed regioselective coupling of

arylboronic acid (and arylstannane where feasible) at the position next to the

sulfur atom in functionalized dibromothiophenes and dibromothiazoles. The anal. of the NMR spectra (using 19F from the boronic acid CF3 group and 31P from the phosphine of the catalyst as probes) of the entire reaction starting from the dibromoheterocycles allowed the qual. proposal that the transmetalation is the rate-limiting step for both sequential substitution processes. The extremely facile oxidative addition at the C-Br bond next to the sulfur atom of the heterocycle instead dets. the positional selectivity. An addnl. Stille reaction then replaced the second halogen, providing the trisubstituted heterocyclic scaffolds of PPAR ligands, which displayed PPAR β/δ agonist activity, as revealed by reporter assays in living cells.

IT 476154-13-9P 918164-63-3P 918164-64-4P

918164-65-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(target PPAR β/δ agonist; mechanism of the site-selective sequential Pd-catalyzed cross-coupling reactions of dibromothiophenes/dibromothiazoles and arylboronic acids and synthesis of PPAR β/δ agonists)

RN 476154-13-9 HCAPLUS

CN Acetic acid, [2-methyl-4-[[[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

RN 918164-63-3 HCAPLUS

CN Acetic acid, 2-[2-methyl-4-[[[4-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (CA INDEX NAME)

RN 918164-64-4 HCAPLUS

CN Acetic acid, 2-[4-[[[4-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (CA INDEX NAME)

918164-65-5 HCAPLUS RN

Acetic acid, 2-[4-[[[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-CN thienyl]methyl]thio]phenoxy]- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 110 CITED REFERENCES AVAILABLE FOR 110 THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L13 ANSWER 2 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2006:1253037 HCAPLUS Full-text

DOCUMENT NUMBER:

INVENTOR(S):

146:33027

TITLE:

Pharmaceutical composition comprising vitamin k Inoue, Satoshi; Sato, Seiji; Kyokawa, Yoshimasa;

Sugita, Ken-Ichi; Torii, Mikinori

PATENT ASSIGNEE(S):

Shionogi & Co., Ltd., Japan

SOURCE:

PCT Int. Appl., 91pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAI	PATENT NO.					KIND DATE				APPL		ION I	-		Di	ATE	
WO	2006	1265	41		A1		2006	1130	1	WO 2					2	0060	523
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	.BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚM,	KN,	ΚP,	KR,
		ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
		MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
		SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,
		VN,	YU,	ZA,	ZM,	zw											
	RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝĖ,	SN,	TD,	TG,	BW,	GH,
		GM,	ΚE,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	ΚZ,	Z, MD, RU, TJ, TM													

PRIORITY APPLN. INFO.:

JP 2005-155837 A 20050527

It is found that a compound having a PPAR δ agonistic activity induces abnormal blood coagulation or a muscular disorder. A pharmaceutical composition comprising the combination of a compound having a PPAR δ agonistic activity and a vitamin K can prevent the abnormal blood coagulation. A pharmaceutical composition comprising a vitamin K can prevent the muscular disorder.

728038-95-7 IT

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pharmaceutical composition comprising vitamin k)

728038-95-7 HCAPLUS RN

Benzenepropanoic acid, 2-methyl-4-[(2R)-2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]propoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN 2006:887897 HCAPLUS Full-text ACCESSION NUMBER:

145:293047 DOCUMENT NUMBER:

Preparation of heterocyclic compounds as activators TITLE:

> for peroxisome proliferator activated receptor δ Sakuma, Shogo; Mochiduki, Nobutaka; Takahashi, Rie;

> > Ι

INVENTOR(S): Hirai, Toshitake; Yamakawa, Tomio; Masui, Seiichiro

Nippon Chemiphar Co., Ltd., Japan PATENT ASSIGNEE(S):

PCT Int. Appl., 115pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent Japanese LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	ENT	NO.			KIND DATE					APPL	ICAT:	ION 1	NO.		Dž	ATE	
WO	2006	0909:	20		A1	_	2006	0831	Ţ	WO 2	006-	JP30	4193		2	00602	228
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	B₩,	BY,	ΒZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	ΗU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,	ΚP,	KR,
	KZ, LC, LK,				LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
	MZ, NA, NG,				NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
		SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,
		VN,	YU,	ZA,	ZM,	ZW											
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG,	BW,	GH,
		GM,	ΚE,	LS,	MW,	ΜŻ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	ΚZ,	MD,	RU,	ТJ,	TM							•			
PRIORITY	APP	LN.	INFO	.:	JP 2005-52762							2		A 2	0050	228	
OTHER SC	HER SOURCE(S):						MARPAT 145:293047										

OTHE GΙ

The title compds. I [R1, R4 = H, alkyl, alkenyl, etc.; R2 = H; R3 = alkyl; or CR2R3 is C0, or CR2R3 is C=CR7R8; R7, R8 = H, alkyl; R5, R6 = H, alkyl, haloalkyl; X, Y = CH, N; Z = O, S; A = (un)substituted pyrazole, thiophene, furan, or pyrrole ring; B = (un)substituted alkylene; n = 0 - 5] are prepared Thus, $2-[4-[3-[3-isopropyl-1-(4-trifluoromethylphenyl)-1H- pyrazol-4-yl]propionyl]-2-methylphenoxy]-2-methylpropionic acid was prepared in a multistep process from [3-isopropyl-1-(4-trifluoromethylphenyl)-1H- pyrazol-4-yl]methanol. In an assay for the activation of peroxisome proliferator-activated receptor <math>\delta$, compds. of this invention showed high activity.

IT 908250-77-1P 908250-81-7P 908250-97-5P

908251-01-4P 908251-03-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of heterocyclic compds. as activators for peroxisome proliferator-activated receptor $\boldsymbol{\delta})$

RN 908250-77-1 HCAPLUS

CN Propanoic acid, 2-methyl-2-[2-methyl-4-[3-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]-1-oxopropyl]phenoxy]- (9CI) (CA INDEX NAME)

RN 908250-81-7 HCAPLUS

CN Acetic acid, [2-methyl-4-[3-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]-1-oxopropyl]phenoxy]- (9CI) (CA INDEX NAME)

RN 908250-97-5 HCAPLUS

CN Propanoic acid, 2-methyl-2-[2-methyl-4-[3-[3-(1-methylethyl)-5-[4-(trifluoromethyl)phenyl]-2-thienyl]-1-oxopropyl]phenoxy]- (9CI) (CA INDEX NAME)

RN 908251-01-4 HCAPLUS

CN Acetic acid, [2-methyl-4-[3-[3-(1-methylethyl)-5-[4-(trifluoromethyl)phenyl]-2-thienyl]-1-oxopropyl]phenoxy]- (9CI) (CA INDEX NAME)

RN 908251-03-6 HCAPLUS

CN Propanoic acid, 2-[4-[3-[3-hexyl-5-(4-methylphenyl)-2-thienyl]-1-oxopropyl]-2-methylphenoxy]-2-methyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 4 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2006:772794 HCAPLUS Full-text

DOCUMENT NUMBER:

145:369215

TITLE:

Species differences in metabolism and pharmacokinetics of a sphingosine-1-phosphate receptor agonist in rats and dogs: formation of a unique glutathione adduct in

the rat

AUTHOR(S):

Anari, M. Reza; Creighton, Mellissa D.; Ngui, Jason S.; Tschirret-Guth, Richard A.; Teffera, Yohannes; Doss, George A.; Tang, Wei; Yu, Nathan X.; Ciccotto, Suzanne L.; Hobra, Donald F., Jr.; Coleman, John B.;

Vincent, Stella H.; Evans, David C.

CORPORATE SOURCE:

Department of Drug Metabolism, Merck Research

Laboratories, West Point, PA, USA

SOURCE:

Drug Metabolism and Disposition (2006), 34(8),

1367-1375

CODEN: DMDSAI; ISSN: 0090-9556

PUBLISHER:

American Society for Pharmacology and Experimental

Therapeutics

DOCUMENT TYPE: Journal LANGUAGE: English

The pharmacokinetics and metabolism of 1-(4-((4-phenyl-5-trifluoromethyl-2-AB thienyl)methoxy)benzyl)azetidine-3-carboxylic acid (MRL-A), a selective agonist for the sphingosine-1-phosphate 1 (S1P1) receptor, were investigated in rats and dogs. In both species, more than 50% of the dose was excreted in bile. Specific to the rat, and observed in bile, were a taurine conjugate of MRL-A and a glucuronide conjugate of an azetidine lactam metabolite. In dogs, a smaller portion of the dose (54% of administered dose) was excreted intact in bile, and the major metabolites detected were an azetidine N-oxide of MRL-A and an acylglucuronide of an N-dealkylation product. This latter metabolite was also observed in rat bile. Stereoselective formation of the N-oxide isomer was observed in dogs, whereas the rat produced comparable amts. of both isomers. The formation of a unique glutathione adduct was observed in rat bile, which was proposed to occur via N-dealkylation, followed by reduction of the putative aldehyde product to form the alc., and dehydration of the alc. to generate a reactive quinone methide intermediate. Incubation of a synthetic standard of this alc. in rat microsomes fortified with reduced glutathione or rat hepatocytes resulted in formation of this unique glutathione adduct.

TΤ 910579-71-4

RL: BSU (Biological study, unclassified); BIOL (Biological study) (species differences in metabolism and pharmacokinetics of a sphingosine-1-phosphate receptor agonist MRL-A in rats and dogs)

RN 910579-71-4 HCAPLUS

Benzoic acid, 4-[[4-phenyl-5-(trifluoromethyl)-2-thienyl]methoxy]- (9CI) CN (CA INDEX NAME)

THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 28 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 5 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN 2006:513667 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER:

145:27731

TITLE:

Preparation of biaryl compounds, particularly

N-(biarylpropionyl)anthranilides, as niacin receptor

agonists and pyridoindolizine derivatives as DP

receptor antagonists, their pharmaceutical

compositions and their combination useful for treating

atherosclerosis and dyslipidemias

Colletti, Steven L.; Tata, James R.; Shen, Hong C.; INVENTOR(S):

Ding, Fa-Xiang; Frie, Jessica L.; Imbriglio, Jason E.;

Chen, Weichun

PATENT ASSIGNEE(S):

Merck & Co., Inc., USA PCT Int. Appl., 100 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

SOURCE:

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT:

.PATENT INFORMATION:

	PATENT NO.					_	DATE		i	APPL:			NO.			ATE	
WO	2006	0579	22		A2 A3		2006 2006		Ī							0051	
***			-				AU,		RA.	BB.	BG.	BR.	RW.	BY.	B7.	CA.	CH.
	** •	•	•	•	•	•	DE,	•	•			-	•				-
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,	KP,	KR,
		ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
		MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
		SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,
		VN,	YU,	ZA,	ZM,	zw											
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		•		•	•		GN,			-							
		GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	ΚZ,	MD,	RU,	ТJ,	TM										
PRIORITY	APP	LN.	INFO	.:						US 2	004-	6302	81P		P 2	0041	123
OTHER SO	URCE	(S):			MAR	PAT	145:	2773	1								

The invention is related to biaryls I [Y = C, N; Z = C(RaRb)n; Ra, Rb =AB independently H, alkyl, OH, F, etc.; n = 1-5; R1 = CO2H, 1H-tetrazol-5-yl, CONHSO2Rc; Rc = (un) substituted alkyl, Ph; X10' = (X10)0-1; X1' = (X1)0-1' X1-X10 = C, or a heteroatom selected from O, S, and N, with provisos; each R2 = H, F, Cl, Br, I, alkyl, heterocyclyl, etc.; or two R2 groups taken together can form a fused Ph or fused heterocycle with ring B; each R3 = H, halo, halo/alkyl, halo/alkoxy, etc.; each R4 = H, halo, Me, etc.], as well as pharmaceutically acceptable salts, solvates, as niacin receptor agonists useful for treating atherosclerosis and dyslipidemias in combination with DP antagonists. The invention is also related to the preparation of DP antagonists. Pharmaceutical compns. comprising I are also included. anthranilide II was prepared by Pd-coupling of 3-(4-iodophenyl)propionic acid with phenylboronic acid, chlorination of biaryl propionic acid (no data) with SOC12, and amidation of acyl chloride (no data) with anthranilic acid. I have an EC50 in the functional assay in vitro GTP γ S binding assay within the range of about less than 1 μM to as high as about 100 μM . Have an IC50 in the 3Hnicotinic acid competition binding assay within the range of 1 nM to about 25

 μM . Selected I do not exhibit measurable in vivo vasodilation in the murine flushing model at doses up to 100 mg/kg or 300 mg/kg in the presence of DP antagonists.

IT 889360-23-0P 889360-24-1P 889360-31-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(niacin agonist; preparation of biaryl compds. as niacin receptor agonists and pyridoindolizine derivs. as DP receptor antagonists and their combination useful for treating atherosclerosis and dyslipidemias)

RN 889360-23-0 HCAPLUS

CN Benzoic acid, 2-[[3-[5-(4-fluoro-2-methoxyphenyl)-2-thienyl]-1-oxopropyl]amino]- (9CI) (CA INDEX NAME)

RN 889360-24-1 HCAPLUS

CN Benzoic acid, 2-[[3-[5-(2-chloro-4-hydroxyphenyl)-2-thienyl]-1-oxopropyl]amino]- (9CI) (CA INDEX NAME)

RN 889360-31-0 HCAPLUS

CN Benzoic acid, 2-[[1-oxo-3-(5-phenyl-2-thienyl)propyl]amino]- (9CI) (CA INDEX NAME)

$$Ph$$
 S $CH_2-CH_2-CH_2-CH_1$

L13 ANSWER 6 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2006:469629 HCAPLUS Full-text

DOCUMENT NUMBER:

144:488936

TITLE:

Preparation of amino acid aryl or heteroaryl

derivatives as glycogen phosphorylase inhibitors

INVENTOR(S):

Evans, Karen; Cichy-Knight, Maria; Coppo, Frank Teen; Dwornik, Kate Ann; Gale, Jennifer Paul; Garrido, Dulce Maria; Li, Yue Hu; Patel, Mehul P.; Tavares, Francis X.; Thomson, Stephen Andrew; Dickerson, Scott Howard; Peat, Andrew James; Sparks, Steven Meagher; Banker,

Pierette; Cooper, Joel P.

PATENT ASSIGNEE(S):

Smithkline Beecham Corporation, USA

SOURCE: PCT Int. Appl., 681 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                   DATE
                                            WO 2005-US39956
                                20060518
                                                                   20051104
    WO 2006052722
                          A1
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
            CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
            GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
             KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,
            MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
             SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
             VN, YU, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
                                            US 2004-626389P
                                                                 P 20041109
PRIORITY APPLN. INFO.:
OTHER SOURCE(S):
                         MARPAT 144:488936
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The invention relates to compds. R-Ar-NR1CO-X-Ar' [R is CO2H or carbamoyl which may be substituted by alkyl, aryl, carboxyalkyl, etc.; Ar is an aromatic, heteroarom., cycloaliph. or heterocyclic ring which may fused to an aromatic or heteroarom. ring; X is carbon, nitrogen, oxygen or sulfur; Ar' is an aromatic or heteroarom. ring; R1 is H or alkyl] or their pharmaceutically-acceptables salts, which are inhibitors of glycogen phosphorylase and can be used to treat diabetes, conditions associated with diabetes, or tissue ischemia, including myocardial ischemia. Thus, N-[3-[[(2,6-dimethylphenyl)amino]carbonyl]amino]-2-naphthoyl]-L-aspartic acid was prepared by treating L-Asp(tBu)-Wang Resin with 3-amino-2-naphthalenecarboxylic acid and then 2,6-dimethylphenyl isocyanate. The product showed IC50 = 0.46 μM for inhibition of glycogen phosphorylase.

IT 887241-67-0P 887241-68-1P 887241-69-2P 887241-70-5P 887241-71-6P 887241-72-7P

887242-52-6P 887242-53-7P 887242-54-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of amino acid aryl or heteroaryl derivs. as glycogen phosphorylase inhibitors)

RN 887241-67-0 HCAPLUS

CN Cyclopropanecarboxylic acid, 1-[[[5-(4-methoxyphenyl)-3-[[[(2,4,6-trimethylphenyl)amino]carbonyl]amino]-2-thienyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 887241-68-1 HCAPLUS

CN Cyclobutanecarboxylic acid, 1-[[[5-(4-methoxyphenyl)-3-[[[(2,4,6-trimethylphenyl)amino]carbonyl]amino]-2-thienyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 887241-69-2 HCAPLUS

CN Cyclopentanecarboxylic acid, 1-[[[5-(4-methoxyphenyl)-3-[[[(2,4,6-trimethylphenyl)amino]carbonyl]amino]-2-thienyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 887241-71-6 HCAPLUS

CN Cycloheptanecarboxylic acid, 1-[[[5-(4-methoxyphenyl)-3-[[[(2,4,6-trimethylphenyl)amino]carbonyl]amino]-2-thienyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 887241-72-7 HCAPLUS

CN Cyclooctanecarboxylic acid, 1-[[[5-(4-methoxyphenyl)-3-[[[(2,4,6-trimethylphenyl)amino]carbonyl]amino]-2-thienyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 887242-52-6 HCAPLUS

CN Cyclohexanecarboxylic acid, 1-[[[5-(4-chlorophenyl)-3-[[[(2,4,6-trimethylphenyl)amino]carbonyl]amino]-2-thienyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 887242-53-7 HCAPLUS

CN Cyclohexanecarboxylic acid, 1-[[[5-(3,4-difluorophenyl)-3-[[[(2,4,6-trimethylphenyl)amino]carbonyl]amino]-2-thienyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN

CN Cyclohexanecarboxylic acid, 1-[[[5-(3,4,5-trifluorophenyl)-3-[[[(2,4,6-trimethylphenyl)amino]carbonyl]amino]-2-thienyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 7 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2005:1290198 HCAPLUS Full-text

DOCUMENT NUMBER:

144:36347

TITLE:

Preparation of triazoles as modulators of peroxisome

proliferator activated receptors (PPAR).

INVENTOR(S):

Zhu, Yan; Ma, Jingyuan; Cheng, Peng; Zhao, Zuchun;

Gregoire, Francine M.; Rakhmanova, Vera A.

PATENT ASSIGNEE(S):

SOURCE:

Metabolex, Inc., USA

PCT Int. Appl., 121 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	rent	NO.								APPL:			NO.			ATE	
	2005				A2				1								
WO	2005																
	W:						ΑU,										
		CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	ΚP,	KR,	ΚZ,
		LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NA,
							PG,										
							TN,										
			ZM,														
	RW:	ВW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
							RU,										
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IS,	IT,	LT,	LU,	MC,	NL,	PL,	PT,
		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,
		MR,	NE,	SN,	TD,	TG											
ΑU	2005	2474	73		A1		2005	1208		AU 2	005-	2474	73		2	0050	524
CA	2567	437			A1		2005	1208		CA 2	005-	2567	437		2	0050	524
	2006																
	1751																
							CZ,										

IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU

PRIORITY APPLN. INFO.:

US 2004-574426P WO 2005-US18318 P 20040525 W 20050524

OTHER SOURCE(S):

MARPAT 144:36347

GΙ

Title compds. [I; Arl = (substituted) Ph, naphthyl, imidazolyl, AΒ benzimidazolyl, pyrrolyl, indolyl, thienyl, benzothienyl, furyl, benzofuryl, benzodioxolyl; Ar2 = (substituted) Ph, pyridyl, pyrazinyl, pyrimidinyl, pyridazinyl, triazinyl; L = specified linker having 1-6 chain atoms; K = bond, specified linker having 1-6 chain atoms; R1 = H, halo, alkyl, haloalkyl, cycloalkyl, cycloalkylalkyl, aryl, aralkyl, heterocyclyl, heterocyclylalkyl; Z = CH2OR6, CO2R6, tetrazol-5-yl, CONHSO2R2, CHO; R2 = H, alkyl, haloalkyl, aryl, aralkyl, heteroaryl, etc.; R6 = H, alkyl, haloalkyl, alkenyl, cycloalkyl, heterocyclyl, aralkyl, aralkenyl, etc.; with provisos], were prepared I are useful in treatment of type 2 diabetes, hyperinsulemia, hyperlipidemia, hyperuricemia, hypercholesteremia, atherosclerosis, cardiovascular disease, Syndrome X, hypertriglyceridemia, hyperglycemia, obesity, and eating disorders. Thus, 2-methyl-2-[2-methyl-4-[5-methyl-2-(4trifluoromethylphenyl)-2H-1,2,3- triazol-4-ylmethylsulfanyl]phenoxy]propionic acid (multistep preparation given) showed EC50 \leq 10 μM in a PPAR α and PPAR δ transactivation assay.

IT 870885-42-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(claimed compound; preparation of triazoles as modulators of peroxisome proliferator activated receptors)

RN 870885-42-0 HCAPLUS

CN Acetic acid, [4-[[[5-[[4-(4-methoxyphenyl)-1-piperazinyl]methyl]-2-[4-(2-thienyl)phenyl]-2H-1,2,3-triazol-4-yl]methyl]thio]-2-methylphenoxy]- (9CI) (CA INDEX NAME)

L13 ANSWER 8 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:962237 HCAPLUS Full-text

DOCUMENT NUMBER:

143:266806

TITLE:

Preparation of N-substituted (hetero)aryl,

particularly furan-2-yl, carboxamides and related compounds as prostanoid EP2 receptor agonists Oxford, Alexander William; Davis, Richard Jon;

Coleman, Robert Alexander; Clark, Kenneth Lyle; Clark, David Edward; Harris, Neil Victor; Fenton, Garry; Hynd, George; Stuttle, Keith Alfred James; Sutton, Jonathan Mark; Ashton, Mark Richard; Boyd, Edward

Andrew; Brunton, Shirley Ann

PATENT ASSIGNEE(S):

Pharmagene Laboratories Limited, UK

SOURCE:

PCT Int. Appl., 238 pp. CODEN: PIXXD2

INVENTOR(S):

Patent

DOCUMENT TYPE: LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

P	PATENT NO.)	DATE		i		ICAT:				D	ATE	
- W	10	2005	0803	67		A1	-	2005	0901	1						2	0050	211
		W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
			CN,	CO,	CR,	CU,	CZ,	DĒ,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
			NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	·SL,	SY,
			ТJ,	TM,	TN,	TR,	TT,	ΤZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
		RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	ΤZ,	UG,	ZM,	ZW,	AM,
			ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
			EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IS,	IT,	LT,	LU,	MC,	NL,	PL,	PT,
			RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,
			MR,	NE,	SN,	TD,	ΤG											
τ	JS	2005	2561	70		A1		2005	1117		US 2	005-	5572	4		2	0050	211
E	EΡ	1723	132			A1		2006	1122		EP 2	005-	7082	87		2	0050	211
		R:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
			IS,	IT,	LI,	LT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR		
PRIORI	T	APP	LN.	INFO	.:						US 2	004-	5435	38P		P 2	0040	212
											US 2	004-	6269	40P		P 2	0041	112
										,	WO 2	005-	GB46	2	1	W 2	0050	211
00000	~	NID OF	101.			MADE	חתכם	1 4 2 .	2660	۸6								

III

OTHER SOURCE(S):

MARPAT 143:266806

GI

$$R^4$$
 R^3
 R^1
 Y
 R^2
 Y

Title compds. of formula R5-A-D-(CH2)n-B (I) [R5 = (un)substituted aryl, AB alkyl; A = (un)substituted 1,4-phenylene, 1,3-phenylene, 1,6-pyridinylene, 1,5-furanylene, etc.; D = CONH and derivs., NHCO and derivs., COCH2, etc.; B = (un) substituted Ph, 2-naphthyl, 5-benzofuran-2-yl, etc.; n = 0-1] their salts, solvates, and chemical protected forms, particularly N-substituted furan carboxamides II [X = (CH2)n; Y = (CH2)m; n = 0-1; m = 0-3; (m + n) = 0-4; R1 =(un) substituted Ph, benzodioxol-5-yl, adamant-1-yl, etc.; R2 = CO2H, CONH2, CH2OH, tetrazol-5-yl; R3, R4 = independently H, (un)substituted alkyl, aryl, etc.; R' = H, (un) substituted alkyl], were prepared as EP2 receptor agonists. Thus, amination of 5-bromo-2-furoic acid with 3-aminophenylacetic acid Et ester (preparation given), Pd-coupling with 4-methoxyphenylboronic acid, and saponification of the ester gave amide III. III displayed a pKi value of > 5 M for binding to human EP2 receptor. Selected I were EP2 agonists/EP4 antagonists.

863702-77-6P, [3-[[(5-Phenylthien-2-yl)carbonyl]amino]phenyl]aceti IT c acid 863702-98-1P, [3-[[(4-Methyl-5-phenylthien-2yl)carbonyl]amino]phenyl]acetic acid RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

> (drug candidate; preparation of N-substituted (hetero)aryl, particularly furan-2-vl, carboxamides and related compds. as prostanoid EP2 receptor agonists)

RN 863702-77-6 HCAPLUS

(Uses)

Benzeneacetic acid, 3-[[(5-phenyl-2-thienyl)carbonyl]amino]- (9CI) CN

863702-98-1 HCAPLUS RN

Benzeneacetic acid, 3-[[(4-methyl-5-phenyl-2-thienyl)carbonyl]amino]-CN (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 9 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN 2005:904352 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 143:248386

TITLE:

Preparation of substituted azole derivatives for treating diseases mediated by PTPase activity

Mjalli, Adnan M. M.; Polisetti, Dharma R.;

Subramanian, Govindan; Quada, James C.; Arimilli, Murty N.; Yarragunta, Ravindra R.; Andrews, Robert C.;

INVENTOR(S):

Xie, Rongyuan

PATENT ASSIGNEE(S):

USA

SOURCE:

GI.

U.S. Pat. Appl. Publ., 204 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	rent	NO.			KIN	D	DATE				ICAT:				D.	ATE	
							2005			US 2	005-	5649	8			0050	
							2005										
CA	2551	909			A1		2005										
WO	2005																
	W:	ΑE,	AG,	AL,	AM,	AT	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
							DE,										
							ID,										
							LV,										
	NO, NZ, C				PG,	PH	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
	TJ, TM, T																
	RW: BW, GH, G				KE,	LS	, MW,	ΜZ,	NA,	SD,	SL,	SZ,	ΤZ,	UG,	ZM,	ZW,	AM,
		ΑZ,	BY,	KG,	ΚZ,	MD	, RU,	ТJ,	TM,	ΑT,	BE,	ВG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FI,	FR,	GB	GR,	ΗU,	IE,	IS,	IT,	LT,	LU,	MC,	NL,	PL,	PT,
		RO,	SE,	SI,	SK,	TR	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,
					TD,												
EP	1730	118			A1		2006	1213		EP 2	005-	7230	26		2	0050	211
	R:	AT,	BE,	BG,	CH,	CY	, CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
	•	IS,	ΙT,	LI,	LT,	LU	, MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	AL,	BA,
	IS, IT, L HR, LV, M																
CN	CN 1922151				Α		2007	0228		CN 2	005-	8000	4860		2	0050	211
PRIORIT	ORITY APPLN. INFO.:									US 2	004-	5439	71P		P 2	0040	212
										WO 2	005-	US45	90		W 2	0050	211
OTHER S	CR SOURCE(S):					PAT	143:	2483	86								

The title compds. I [a, b = 0-2; W = O, S, NR2 (wherein R2 = alkyl, etc.); R1 = H, halo, CN, etc.; L1 = a direct bond, (un) substituted NHCO, NHSO2, etc.; Ar1 = (un) substituted (hetero) aryl, fused cycloalkylaryl, etc.; Ar2 = (un) substituted (hetero) arylene, fused arylcycloalkylene, etc.; L2 = CH2, O, alkylene, etc.] which can be useful as inhibitors of protein tyrosine phosphatases and thus can be useful for the management, treatment, control, or the adjunct treatment of diseases mediated by PTPase activity such as type I diabetes and type II diabetes, were prepared Thus, treating 4-(2,4-dichlorophenyl)-2-[2-(4-methoxyphenyl)-(E)-vinyl]-1H-imidazole with Me bromoacetate followed by ester hydrolysis afforded 56% {4-(2,4-dichlorophenyl)-2-[2-(4-methoxyphenyl)-(E)-vinyl]-1H-imidazol-1-yl}acetic acid. The representative compds. I were tested for inhibition of PTP-1B. In

general, the exemplified compds. I may inhibit PTP-1B with IC50 of less than 20 μ M. The pharmaceutical compns. comprising the compds. I, and their use in treating human or animal disorders are also disclosed.

IT 863245-14-1P 863245-23-2P 863245-65-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of substituted azole derivs. for treating diseases mediated by PTPase activity)

RN 863245-14-1 HCAPLUS

CN Benzoic acid, 4-[[2-[(1E)-2-[4-(5-chloro-2-thienyl)phenyl]ethenyl]-4-(2,4-dichlorophenyl)-1H-imidazol-1-yl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 863245-23-2 HCAPLUS

CN Benzoic acid, 4-[[2-[(1E)-2-[4-(5-acetyl-2-thienyl)phenyl]ethenyl]-4-(2,4-dichlorophenyl)-1H-imidazol-1-yl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 863245-65-2 HCAPLUS

CN Glycine, N-[4-[[2-[(1E)-2-[4-(5-acetyl-2-thienyl)phenyl]ethenyl]-4-(2,4-dichlorophenyl)-1H-imidazol-1-yl]methyl]phenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

L13 ANSWER 10 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:283476 HCAPLUS Full-text

DOCUMENT NUMBER:

142:355258

TITLE:

Preparation of azole compounds containing phenylacetic

acid moiety as PPAR δ agonists

INVENTOR(S):

Kusuda, Shinya; Nakayama, Yoshisuke; Tajima, Hisao;

Sakamoto, Takahiko

PATENT ASSIGNEE(S):

Ono Pharmaceutical Co., Ltd., Japan

SOURCE:

PCT Int. Appl., 81 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	PATENT NO.					D	DATE					ION I			Di	ATE	
WC	2005	0284	53		A1	-	2005	0331	. 1						2	0040	921
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
		CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
							ID,										
							LV,										
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
							ΤZ,										
	. RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	ΤZ,	UG,	ZM,	ZW,	AM,
							RU,										
							GR,										
							CF,										
		SN,	TD,	TG													
AU	2004	2743	37		A1		2005	0331		AU 2	004-	2743	37		2	0040	921
CA	2539	554			A1		2005	0331		CA 2	004-	2539	554		2	0040	921
EF	1666	472			A1		2006	0607		EP 2	004-	7734	49		2	0040	921
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	FI,	RO,	CY,	TR,	BG,	CZ,	ΕĒ,	HU,	PL,	SK				
BF	2004	0145	80		Α		2006	1107		BR 2	004-	1458	0		2	0040	921
CN	1882	553			Α		2006	1220		CN 2	004-	8003	3842		2	0040	921
NC	2006	0012	81		Α		2006	0622		NO 2	006-	1281			2	0060	321
PRIORIT	Y APP	LN.	INFO	.:						JP 2	003-	3306	16	Ž	A 2	0030	922
										JP 2	004-	2315	46		A 2	0040	806
										WO 2	004-	JP14	137	1	₩ 2	0040	921
	OHDOR	101			MAD	חאת	140.	2552	E 0								

OTHER SOURCE(S): MARPAT 142:355258

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$$F_3C$$
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Title compds. I [R1, R2 = H, alkyl, etc.; R3 = optionally substituted alkyl with halo, etc.; R4 = H, alkyl; R5, R6 = H, alkyl; further detail on R5, R6 is provided.; X = S, O, etc.; ring A = optionally substituted cyclic group] were prepared For example, reaction of compound II, e.g., prepared from 4- (trifluoromethyl)piperidine·HCl in 5 steps, with 2-fluoro-3- hydroxyphenylacetic acid Me ester under Mitsunobu condition followed by hydrolysis using aqueous NaOH afforded compound III. The exemplified compound III exhibited 1.23 fold increase for PPAR δ at 1.0 μ M. Compds. I are claimed useful as PPAR δ agonists for the treatment of hyperlipidemia, obesity. Formulations are given.

Ι

IT 848943-73-7P 848943-74-8P 848943-77-1P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use): BIOL (Biological study); PREP (Preparation); USES

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of azole compds. containing phenylacetic acid moiety as PPAR agonists for treatment of hyperlipidemia, obesity)

RN 848943-73-7 HCAPLUS

CN Benzeneacetic acid, 4-methyl-3-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

RN 848943-74-8 HCAPLUS

CN Benzeneacetic acid, 4-methyl-3-[2-[5-methyl-2-[4-(3-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

RN 848943-77-1 HCAPLUS

CN Benzeneacetic acid, 4-methyl-3-[2-[5-(1-methylethyl)-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 11 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:116569 HCAPLUS Full-text

DOCUMENT NUMBER: 142:207534

TITLE: High-sensitive electrophotographic photoreceptor for

positive charging

INVENTOR(S): Kuroda, Masami; Sekine, Nobuyuki; Kotani, Noriko;

Okura, Kenichi; Takeshima, Motohiro

PATENT ASSIGNEE(S): Fuji Electric Imaging Device Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005037476 PRIORITY APPLN. INFO.:	Α	20050210	JP 2003-197697 JP 2003-197697	20030716 20030716
OTHER SOURCE(S):	MARPAT	142:207534		

AΒ The photoreceptor has a light-sensitive layer containing a charge generating substance and a charge transporting substance I [R1-3 = H, halo, (substituted) C1-8 alkyl, (substituted) aryl; R4 = H, C1-8 alkyl; X = S, O; n = 1-3] with electron transportability on an elec. conducting support.

IT 839717-34-9

> RL: DEV (Device component use); USES (Uses) (electrophotog. photoreceptor containing tetracyano indene compound electron-transporting agent)

839717-34-9 HCAPLUS RN

Propanedinitrile, 2,2'-[2-[[5-(3,5-dichlorophenyl)-2-thienyl]methylene]-1H-CN indene-1,3(2H)-divlidene|bis- (9CI) (CA INDEX NAME)

L13 ANSWER 12 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2005:34105 HCAPLUS Full-text

DOCUMENT NUMBER:

142:138304

TITLE:

Semiconductor for photoelectric conversion material,

photoelectric converter, and photoelectrochem. cell Ofuku, Koji; Kagawa, Nobuaki; Tanaka, Tatsuo

INVENTOR(S):

Konica Minolta Holdings, Inc., Japan

PATENT ASSIGNEE(S):

Jpn. Kokai Tokkyo Koho, 64 pp.

SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005011800	Α	20050113	JP 2004-127878	20040423
PRIORITY APPLN. INFO.:			JP 2003-147449 A	20030526

The semiconductor contains a compound of the structure Cp=[L1-AB L2]m=L3(Ar2)nAr1NR1R2 [Ar1, Ar2 = a five- or six-membered aromatic ring or heterocyclic ring; Cp = an atomic group rendering the compound absorbing in visible and near IR range with ≥1 substitutable carboxyl group; R1, R2 = H, (substituted) aliphatic, (substituted) aromatic, or (substituted) heterocyclic group; R1 and R2, R1 and Ar1, or R2 and Ar3 may bond to form a N containing heterocyclic ring; L1-L3 = (substituted) methine group; m = integer 0-2; and n = integer 1-4] adsorbed onto its surface. The photoelec. converter has the above semiconductor on a conductive support. The photoelectrochem. cell has the photoelec. converter, a charge transporting layer, and a counter electrode.

827021-30-7 IT

RL: MOA (Modifier or additive use); USES (Uses)

(pigment sensitizers for metal oxide or metal sulfide semiconductors for photoelec. converters and photoelectrochem. cells)

827021-30-7 HCAPLUS RN

1,3-Benzenedicarboxylic acid, 5-[[1-cyano-2-[[5-[2-methyl-4-(1-CN

piperidinyl)phenyl]-2-thienyl]methylene]-3-oxobutylidene]amino]- (9CI)
(CA INDEX NAME)

$$\begin{array}{c|c}
 & \text{Me} & \text{O} \\
 & \text{N} & \text{CH} & \text{C} & \text{CN} \\
 & \text{CO2H} & \text{CO2H}
\end{array}$$

L13 ANSWER 13 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2004:963142 HCAPLUS Full-text

DOCUMENT NUMBER:

141:388701

TITLE:

Benzoic acid derivatives and factor VII inhibitors

containing them

INVENTOR(S):

Ishihara, Tsukasa; Miura, Tadanori; Koike, Takanori;

Seki, Norio; Hirayama, Fukushi; Shigenaga, Kenshi

PATENT ASSIGNEE(S):

Yamanouchi Pharmaceutical Co., Ltd., Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 45 pp.

CODEN: JKXXAF

Ι

DOCUMENT TYPE: LANGUAGE:

Patent Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004315395 'PRIORITY APPLN. INFO.:	Α	20041111	JP 2003-109424 JP 2003-109424	20030414 20030414
OTHER SOURCE(S):	MARPAT	141:388701		

$$R1$$
 $R5$
 $C02R7$
 $R4$
 $R6$
 $R2$
 $R3$

The derivs. I [ring A = benzene, thiophene, 6-membered ring having 1-4 N atom(s); R1 = CONH2, CH2NH2; R2-R4 = H, lower alkyl(oxy), OH, halo, lower haloalkyl(oxy), NH2, NO2, cyano, lower alkylamino, di(lower alkyl)amino, cycloalkylamino, cycloalkylakylamino; R5 = NR8COR9, CONR1OR11; R6-R8 = H, lower alkyl; R9-R11 = H, (un)substituted alkyl(oxy), (un)substituted cycloalkyl, (un)substituted aryl, (un)substituted heterocyclyl having 1-4 N, S, O; R3 and R4 may be bonded together to form CH:CHCH:CH, OCH2CH2O, OCH2O; NR1OR11 may be (un)substituted heterocyclyl] or their salts are claimed. Blood coagulation factor VII inhibitors containing I or their salts are also claimed. Thus, preparation of 2'-[[4-(aminomethyl)phenyl]amino]carbo nyl]-4-

PATENT INFORMATION:

PA'	rent		KIN	D	DATE								D.	ATE				
WO	2004	0631	90		A1	-	2004	 0729	1		003-				2	0031	- 231	
	W:						ΑU,											
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
		GE,	GH,	GM,	HR,	ΗU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	ΚZ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	
		ΝZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	
		TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	zw	•	
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	ΤZ,	UG,	ZM,	ZW,	AM,	ΑZ,	
		BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	·BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	
		ES,	FI,	FR,	GB,	GR,	ΗU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	
		-	-				CI,											TG
	2510																	
	2003																	
EP	1581																	
	R:		•	•	•	•	ES,	•	•	•	•	•		•	•	-	PT,	
							RO,											
	2006																	
	2006				A1		2006	0928		US 2	<u> 005-</u>	5415	<u>0.2</u> ·		2	0051	223	
PRIORIT	Y APP	LN.	IÑFO	.:									41P					
										WO 2	003-	US41	690		W 2	0031	231	
OTHER S	OURCE	(S):			MAR	PAT	141:	1404	30			/						

GΙ

Title compds. I [wherein A = carboxy(alkyl), tetrazolyl(alkyl), AB nitrilo(alkyl), carboxamido(alkyl), sulfonamido(alkyl); E = (un)substituted (CH2)0-1A; T = (un) substituted specified heterocyclyl, (hetero)aryl; U =(un) substituted aliphatic linker wherein one C of the linker may be replaced with O, NH, or S; X = a bond, O, S, SO2, NH; Y = a bond, CH2, O, S, NH; Z1 = aH, Z3(alkyl)Z4; Z2 = NH, S, O, with provisos; Z3 = a bond, CO, CO2, CONZ5, SO2; Z4 = (un) substituted (hetero) aryl; Z5 = H, (un) substituted (hetero) aryl; R2 = absent, (hetero)alkyl; R8 = H, alkyl, alkylenyl, oxo, sulfo, halo; R9 = H, alkyl, alkylenyl, halo, allyl, oxo, sulfo, OH, alkoxy, (un) substituted aryl(alkyl), heteroaryl; or R8 and R9 may combine to form a fused ring; R33 = alkyl, (un) substituted alkoxy, Ph, thienyl, pyridyl, piperidinyl, morpholinyl, tetrahydropyranyl; n = 1-3; or stereoisomers, pharmaceutically acceptable salts, solvates, and hydrates thereof] were prepared as peroxisome proliferator activated receptor (PPAR) modulators (no data). For example, 5chloromethyl-4-isopropyl-2-(4- trifluoromethylphenyl)thiazole was coupled with

ΙI

(6-hydroxybenzo[b]thiophen- 3-yl)acetic acid Et ester in the presence of Cs2CO3 in acetonitrile to give II. I and their pharmaceutical compns. are expected to be effective in treating and preventing Syndrome X, Type II diabetes, and atherosclerosis (no data).

IT 476154-35-5P, 3-[2-Methyl-4-[[3-methyl-5-(4-

trifluoromethylphenyl)thiophen-2-yl]methoxy]phenyl]propionic acid
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(intermediate; preparation of fused heterocyclic derivs. as PPAR modulators for treatment of diabetes mellitus, syndrome X, and related disorders) 476154-35-5 HCAPLUS

Benzenepropanoic acid, 2-methyl-4-[[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methoxy]- (9CI) (CA INDEX NAME)

L13 ANSWER 16 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:606460 HCAPLUS Full-text

DOCUMENT NUMBER: 141:157025

TITLE: Preparation of thiophenes as PPAR modulators for

treatment of diabetes mellitus, cardiovascular

diseases, inflammatory diseases, and related disorders

INVENTOR(S): Mantlo, Nathan Bryan; Wang, Xiaodong; Zhu, Guoxin

PATENT ASSIGNEE(S): Eli Lilly and Company, USA

SOURCE: PCT Int. Appl., 137 pp.

CODEN: PIXXD2
OCCUMENT TYPE: Patent

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

RN

CN

PAT	PATENT NO.				KIN)	DATE			APPL:					D	ATE		
						-												
WO	2004	0631	84		A1		2004	0729	1	WO 2	003-1	JS39:	118		20	0031	231	
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	ΕE,	EG,	ES,	FI,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KΡ,	KR,	ΚZ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	ΝI,	NO,	
		ΝZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	
		TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	
		BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	
		ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	
		TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
AU	2003	2964	02		A1		2004	0810		AU 2	003-	2964	02		2	0031	231	
EP	1583	754			A1		2005	1012		EP 2	003-	8151	94		2	0031	231	
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	ÇZ,	EE,	ΗU,	SK		
US	2006	0947	68		A1		2006	0504		US 2	005-	5 <u>403</u>	<u>3</u> 0		2	0050	621	
PRIORITY	Y APP	LN.	INFO	.:						US 2	003-	4385	87P		P 2	0030	106	

OTHER SOURCE(S):

MARPAT 141:157025

Title compds. I [wherein R1 = H, (un)substituted alkyl, alkenyl, AB (hetero)aryl(alkyl), arylheteroalkyl, cycloalkylaryl(alkyl); R8 = H, alkyl, alkylenyl, halo; R9 = H, (un)substituted alkyl, alkylenyl, halo, arylalkyl, heteroaryl, allyl, alkoxy, etc.; R10, R11 = independently H, OH, CN, NO2, halo, oxo, (un) substituted (halo) alkyl, alkoxy, cycloalkyl, (hetero)aryl(alkyl), cycloalkylaryl(alkyl), aryloxy, acyl, carboxy, amino, sulfamov1, etc.; E = (un)substituted carboxy(methy1), tetrazolyl(methy1), nitriloalkyl, carboxamido(methyl), sulfonamido(methyl); U = (un) substitutedaliphatic linker wherein one C of the linker is optionally replaced with O, NH, or S; X = bond, O, S, SO2, NH; Y = bond, CH2, NH; or stereoisomers, pharmaceutically acceptable salts, solvates, and hydrates thereof] were prepared as peroxisome proliferator activated receptor (PPAR) modulators (no data). For example, coupling of 2-chloromethyl-5-(4trifluoromethylphenyl)thiophene with 3-(4-hydroxy-2-methylphenyl)propionic acid Me ester in the presence of Cs2CO3 in acetonitrile, followed by saponification with NaOH in THF and MeOH provided II. I and their pharmaceutical compns. are expected to be effective in treating and preventing diabetes mellitus, cardiovascular disorders, inflammatory conditions, and other disorders (no data).

476154-35-5P, 3-[2-Methyl-4-[[3-methyl-5-(4-ΙT trifluoromethylphenyl)thien-2-yl]methoxy]phenyl]propionic acid 728038-74-2P, 3-[2-Methyl-4-[[5-(4-trifluoromethylphenyl)thien-2yl]methoxy]phenyl]propionic acid 728038-76-4P, $\hbox{$[2-Methyl-4-[[5-(4-trifluoromethylphenyl)thien-2-yl]$methoxy]$phenoxy]$ acetic}$ acid 728038-77-5P, 3-[2-Methyl-4-[[3-phenyl-5-(4trifluoromethylphenyl)thien-2-yl]methoxy[phenyl]propionic acid 728038-78-6P, 3-[4-[[3,5-Bis(4-trifluoromethylphenyl)thien-2yl]methoxy]-2-methylphenyl]propionic acid 728038-79-7P, 3-[2-Methyl-4-[1-[5-(4-trifluoromethylphenyl)thien-2yl]propoxy]phenyl]propionic acid 728038-80-0P, 3-[2-Methyl-4-[1-[5-(4-trifluoromethylphenyl)thien-2yl]butoxy]phenyl]propionic acid 728038-81-1P, 3-[2-Methyl-4-[2-methyl-1-[5-(4-trifluoromethylphenyl)thien-2yl]propoxy]phenyl]propionic acid 728038-82-2P, 3-[2-Methyl-4-[1-[5-(4-trifluoromethylphenyl)thien-2-yl]-2phenylethoxy]phenyl]propionic acid 728038-84-4P,

3-[4-[[1-[3-(2-Hydroxyethyl)]-5-(4-trifluoromethylphenyl)]thien-2yl]ethyl]sulfanyl]-2-methylphenyl]propionic acid 728038-85-5P, 2-Methoxy-3-[4-[2-[3-methyl-5-(4-trifluoromethylphenyl)thien-2yl]propoxy]phenyl]propionic acid 728038-86-6P 728038-87-7P, (R) -[2-Methyl-4-[[2-[3-methyl-5-(4trifluoromethylphenyl)thien-2-yl]propyl]sulfanyl]phenoxy]acetic acid 728038-88-8P, (S)-[2-Methyl-4-[[2-[3-methyl-5-(4trifluoromethylphenyl)thien-2-yl]propyl]sulfanyl]phenoxy]acetic acid 728038-89-9P, 3-[2-Methyl-4-[[2-[3-methyl-5-(4trifluoromethylphenyl)thien-2-yl]propyl]sulfanyl]phenyl]propionic acid 728038-90-2P, [3-[2-[3-Methyl-5-(4-trifluoromethylphenyl)thien-2-methyl-5-(4-trifluoromethylphenyl)thien-2-yl]propoxy]phenyl]propionic acid 728038-95-7P, (R) -3-[2-Methyl-4-[2-[3-methyl-5-(4trifluoromethylphenyl)thien-2-yl]propoxy]phenyl]propionic acid 728038-96-8P, [2-Methyl-4-[[2-[3-methyl-5-(4trifluoromethylphenyl)thien-2-yl]propyl]sulfanyl]phenoxy]acetic acid 728038-97-9P, 3-[2-Methyl-4-[1-[3-methyl-5-(4trifluoromethylphenyl)thien-2-yl]butoxy]phenyl]propionic acid 728038-98-0P, 3-[2-Methyl-4-[2-methyl-1-[3-methyl-5-(4trifluoromethylphenyl)thien-2-yl]propoxy]phenyl]propionic acid 728038-99-1P, 3-[2-Methyl-4-[1-[3-methyl-5-(4trifluoromethylphenyl)thien-2-yl]-2-phenylethoxy]phenyl]propionic acid RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (PPAR modulator; preparation of thiophenes as PPAR modulators for treatment of diabetes mellitus, cardiovascular diseases, inflammatory diseases, and other disorders) 476154-35-5 HCAPLUS Benzenepropanoic acid, 2-methyl-4-[[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methoxy]- (9CI) (CA INDEX NAME)

RN CN

RN 728038-74-2 HCAPLUS
CN Benzenepropanoic acid, 2-methyl-4-[[5-[4-(trifluoromethyl)phenyl]-2thienyl]methoxy]- (9CI) (CA INDEX NAME)

RN 728038-76-4 HCAPLUS
CN Acetic acid, [2-methyl-4-[[5-[4-(trifluoromethyl)phenyl]-2thienyl]methoxy]phenoxy]- (9CI) (CA INDEX NAME)

RN 728038-77-5 HCAPLUS

CN Benzenepropanoic acid, 2-methyl-4-[[3-phenyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methoxy]- (9CI) (CA INDEX NAME)

F₃C
$$CH_2-CH_2-CO_2H$$

RN 728038-78-6 HCAPLUS

CN Benzenepropanoic acid, 4-[[3,5-bis[4-(trifluoromethyl)phenyl]-2-thienyl]methoxy]-2-methyl- (9CI) (CA INDEX NAME)

F₃C
$$CH_2 - CH_2 - CH_2 - CO_2H$$
 CF_3

RN 728038-79-7 HCAPLUS

CN Benzenepropanoic acid, 2-methyl-4-[1-[5-[4-(trifluoromethyl)phenyl]-2-thienyl]propoxy]- (9CI) (CA INDEX NAME)

F₃C
$$\stackrel{\text{Me}}{\smile}$$
 CH₂-CH₂-CO₂H

RN 728038-80-0 HCAPLUS

CN Benzenepropanoic acid, 2-methyl-4-[1-[5-[4-(trifluoromethyl)phenyl]-2-thienyl]butoxy]- (9CI) (CA INDEX NAME)

F3C
$$n-Pr$$
 $CH_2-CH_2-CO_2H$

RN 728038-81-1 HCAPLUS

CN Benzenepropanoic acid, 2-methyl-4-[2-methyl-1-[5-[4-(trifluoromethyl)phenyl]-2-thienyl]propoxy]- (9CI) (CA INDEX NAME)

RN 728038-82-2 HCAPLUS

CN Benzenepropanoic acid, 2-methyl-4-[2-phenyl-1-[5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethoxy]- (9CI) (CA INDEX NAME)

RN 728038-84-4 HCAPLUS

CN Benzenepropanoic acid, 4-[[1-[3-(2-hydroxyethyl)-5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethyl]thio]-2-methyl- (9CI) (CA INDEX NAME)

RN 728038-85-5 HCAPLUS

CN Benzenepropanoic acid, α -methoxy-4-[2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]propoxy]- (9CI) (CA INDEX NAME)

RN 728038-86-6 HCAPLUS

CN Benzenepropanoic acid, α -methyl-4-[2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]propoxy]- α -phenoxy-(9CI) (CA INDEX NAME)

RN 728038-87-7 HCAPLUS

CN Acetic acid, [2-methyl-4-[[(2R)-2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]propyl]thio]phenoxy]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 728038-88-8 HCAPLUS

CN Acetic acid, [2-methyl-4-[[(2S)-2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]propyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.;

RN 728038-89-9 HCAPLUS

CN Benzenepropanoic acid, 2-methyl-4-[[2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]propyl]thio]- (9CI) (CA INDEX NAME)

RN 728038-90-2 HCAPLUS

CN Benzeneacetic acid, 3-[2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]propoxy]- (9CI) (CA INDEX NAME)

RN 728038-93-5 HCAPLUS

CN Benzenepropanoic acid, 2-methyl-4-[1-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]propoxy]- (9CI) (CA INDEX NAME)

RN 728038-95-7 HCAPLUS

CN Benzenepropanoic acid, 2-methyl-4-[(2R)-2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]propoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 728038-96-8 HCAPLUS

CN Acetic acid, [2-methyl-4-[[2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]propyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

metalloproteinase MMP-12 inhibitors, as well as their pharmaceutical compositions for treating respiratory

diseases

INVENTOR(S):

Dublanchet, Anne-Claude; Compere, Delphine; Cluzeau,

Philippe; Blais, Stephane

PATENT ASSIGNEE(S):

Warner-Lambert Company LLC, USA

SOURCE:

Eur. Pat. Appl., 111 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	rent :	NO.			KINI)	DATE			APPL	ICAT:	ION I	NO.		D?	ATE	
EP	1394	 159			A1	_	2004	0303		EP 2	002-2	2920	37		20	00208	313
	R:	AT,														MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	SK		
CA	2497	632			A 1		2004	0304		CA 2	003-	2497	632		20	30308	307
WO	2004	0184	48		A1		2004	0304		WO 2	003-1	EP87	50		20	00308	307
	W:										BG,					CH,	CN,
		co,	CR,	CU,	CZ,	DE,	DK,	DM,	DΖ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,
											MW,						
											SG,						
											YU,						
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
											CH,						
											NL,						
											GW,						
AU	2003										003-						
	1534						2005	0601		EP 2	003-	7922	70		2	0030	807
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙT,	LI,	LŲ,	NL,	SE,	MC,	PT,
											TR,						
BR	2003										003-						807
JP	2006	5046	74		\mathbf{T}		2006	0209		JP 2	004-	5300	99		2	0030	807
	2004																
PRIORIT											002-					0020	
										WO 2	003-	EP87	50	1	w 2	0030	807

OTHER SOURCE(S):

MARPAT 140:217508

GI

Title compds. I [wherein X = O or S; Y = O, NH and derivs.; Ra = H, halo, AΒ alkyl, hydroxy, alkoxy; Rb = H, halo, alkyl; A = Ph, cycloakyl, cycloalkenyl; R1, R2 = independently H, halo, CN, NO2, haloalkyl, haloalkoxy, alk(en/yn)yl, OH and derivs., NH2 and derivs., S(O)nH and derivs., CO2H and derivs., CONH2 and derivs., NHSO2H and derivs., etc.; n = 0-2; R3 = H, alkyl, (un) substituted cycloalkyl aryl, heterocyclyl, etc.; and their isomers, pharmaceutically acceptable salts of addition with an acid or base] were prepared as metalloproteinase MMP-12 inhibitors for treating respiratory diseases. For example, II was prepared, in 3 steps, by oxidation of 4-bromothiophene-2carboxaldehyde, acylation of 2-morpholin-4- ylethanamine with thiophene carboxylic acid, followed by Pd-cross coupling of the bromothiophene intermediate with (4-isopropylphenyl)boronic acid. I selectively inhibited MMP-12 in vitro with an IC50 value < 5 μM . Thus, I and their formulations are useful for treating obstructive pulmonary diseases, emphysema, asthma, chronic bronchitis, etc.

(MMP-12 inhibitor; preparation of thiophenes as selective MMP-12 inhibitors,

for treating pulmonary diseases)

RN 666721-54-6 HCAPLUS

CN 2-Propenoic acid, 3-[4-[[[4-[4-(trifluoromethoxy)phenyl]-2-thienyl]carbonyl]amino]phenyl]-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 666721-58-0 HCAPLUS

CN Benzenepropanoic acid, 4-[[[4-[4-(trifluoromethoxy)phenyl]-2-thienyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 666721-76-2 HCAPLUS

CN Benzeneacetic acid, 4-[[[4-[4-(1,1-dimethylethyl)phenyl]-2-thienyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 666721-78-4 HCAPLUS

CN Benzeneacetic acid, 4-[[[4-[4-(trifluoromethoxy)phenyl]-2-thienyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 666721-80-8 HCAPLUS
CN Benzeneacetic acid, 4-[[4-[4-(methylthio)phenyl]-2thienyl]carbonyl]amino]- (9CI) (CA INDEX NAME)

RN 666721-84-2 HCAPLUS
CN Benzeneacetic acid, 4-[[[4-(4-methoxyphenyl)-2-thienyl]carbonyl]amino](9CI) (CA INDEX NAME)

RN 666722-03-8 HCAPLUS
CN Cyclohexaneacetic acid, 4-[[[4-[4-(trifluoromethoxy)phenyl]-2-thienyl]carbonyl]amino]-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 19 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:56568 HCAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 140:402224

TITLE: Detergents profoundly affect inhibitor potencies

against both cyclo-oxygenase isoforms

AUTHOR(S): Ouellet, Marc; Falgueyret, Jean-Pierre; Percival, M.

David

CORPORATE SOURCE: Department of Biochemistry and Molecular Biology,

Merck Frosst Centre for Therapeutic Research,

Pointe-Claire-Dorval, QC, 1005, Can.

SOURCE: Biochemical Journal (2004), 377(3), 675-684

CODEN: BIJOAK; ISSN: 0264-6021

PUBLISHER: Portland Press Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

The sensitivity of Coxs (cyclo-oxygenases) to inhibition is known to be highly AB dependent on assay conditions. In the present study, the inhibitor sensitivities of purified Cox-1 and -2 were determined in a colorimetric assay using the reducing agent N,N,N',N'-tetramethyl-p-phenylenediamine (TMPD). With the detergent genapol X-100 (2 mM) present, the potencies of nimesulide, ibuprofen, flufenamic acid, niflumic acid and naproxen were increased over 100-fold against Cox-2 and titration curve shapes changed, so that maximal inhibition now approached 100%. Indomethacin, diclofenac and flosulide were not changed in potency. Similar effects of genapol were observed with inhibitors of Cox-1. DuP-697 and two analogs became more than 10-fold less potent against Cox-2 with genapol present. Tween-20, Triton X-100 and phosphatidylcholine, but not octylglucoside, gave qual. similar effects as genapol. Similar detergent-dependent changes in inhibitor potency were also observed using a [14C]arachidonic acid HPLC assay. The increases in potency of ibuprofen, flufenamic acid, isoxicam and niflumic acid towards Cox-2 and ibuprofen towards Cox-1 were accompanied by a change from time-independent to time-dependent inhibition. The interactions of Cox inhibitors has been described in terms of multiple binding step mechanisms. The genapol-dependent increase in inhibitor potency for ketoprofen was associated with an increase in the rate constant for the conversion of the initial enzyme-inhibitor complex to a second, more tightly bound form. The loss of potency for some inhibitors is probably due to inhibitor partitioning into detergent micelles. The present study identifies detergents as another factor that must be considered when determining inhibitor potencies against both Cox isoforms. 690657-94-4, Biaryl A IT

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Cox inhibitor; detergent effects on inhibitor potencies against cyclooxygenase isoforms)

RN 690657-94-4 HCAPLUS

CN Benzeneacetic acid, 4-[6-[5-(4-fluorophenyl)-4-[4-(methylsulfonyl)phenyl]-2-thienyl]hexyl]- (9CI) (CA INDEX NAME)

THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 48 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

HCAPLUS COPYRIGHT 2007 ACS on STN L13 ANSWER 20 OF 32 2003:855915 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER:

139:350727

TITLE:

Preparation of indaneacetic acid derivatives for treating diabetes or diabetes-related disorders Wickens, Philip; Cantin, Louis-David; Kumarasinghe,

INVENTOR(S): Ellalahewage; Chuang, Chih-Yuan; Liang, Sidney X.

PATENT ASSIGNEE(S):

SOURCE:

Bayer Pharmaceuticals Corporation, USA PCT Int. Appl., 119 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PAT	TENT 1												NÖ.		D	ATE	
		2003	0894	18		A1			1030			2003-		725		2	0030	416
	WO	2003																
		W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
			co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,
												MW,						
												SK,						
												ZM,						
		RW:										TZ,		ZM,	ZW,	AM,	ΑZ,	BY,
												CH,						
												NL,						
												GW,						
	CN	1854			•							2006-						
		2482				A1												
	AU	2003	2219	60		A1		2003	1103		AU 2	2003-	2219	60		2	0030	416
	EP	1497	271			A1		2005	0119		EP 2	2003-	7184	23		2	0030	416
												IT,						
												TR,						
	US	2005										2003-						416
	JΡ	2005	5268	34		Т						2003-						
	US	2005	0753	38		A1						2004-					0040	
	US	7112	597			В2		2006										
								2006	0914		US 2	2006-	4291	36		2	0060	505
PRTO			06205723 A1								2002-					0020	416	
												2001-					0010	
						•						2002-					0020	725
												2002-					0020	

OTHER SOURCE(S):

MARPAT 139:350727

GI

$$R^{3}$$
 R^{2}
 R^{2}
 R^{3}
 R^{4}

The title compds. [I; R, R1 = H, alkyl; R2 = H, alkyl, (un)substituted Ph; R3 = H, halo, NO2, etc.; R4 = cycloalkyl, alkenyl, NO2, etc.; X = O, S], useful in the treatment of diseases such as diabetes, obesity, hyperlipidemia, and atherosclerotic diseases, were prepared and formulated. E.g., a multi-step synthesis of (1S)-II, was given.

Ι

IT 619300-35-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of indaneacetic acid derivs. for treating diabetes or diabetes-related disorders)

RN 619300-35-5 HCAPLUS

CN 1H-Indene-1-acetic acid, 5-[2-[2-[3-(5-acetyl-2-thienyl)phenyl]-5-methyl-4-oxazolyl]ethoxy]-2,3-dihydro-, (1S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 21 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:610457 HCAPLUS Full-text

DOCUMENT NUMBER:

139:164808

TITLE:

Preparation of thienopyrimidines as gonadotropic

hormone-releasing hormone antagonists

INVENTOR(S):

Furuya, Shuichi; Imada, Takashi; Hitaka, Takenori; Miwa, Kazuhiro; Kusaka, Masami; Suzuki, Nobuhiro

PATENT ASSIGNEE(S):

Takeda Chemical Industries, Ltd., Japan

SOURCE:

PCT Int. Appl., 232 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	PATENT NO.						KIND DATE				ICAT:		DATE					
WO	WO 2003064429					A1 20030807			1	wo 2	003-	JP828	20030129					
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,	
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KR,	ΚZ,	LC,	LK,	LR,	LS,	
		LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	ΝZ,	OM,	PH,	PL,	
		PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	
		UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	zw								
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,	
*		KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	ВG,	CH,	CY,	CZ,	DE,	DK,	ΕE,	ES,	
•		FI,	FR,	GB,	GR,	HU,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	SI,	SK,	TR,	BF,	
		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG		
JP	JP 2003292492						2003	1015		JP 2	003-	2050	6	20030129				
EP	1479	684			A1		2004	1124		EP 2	003-	73,48	20030129					
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK		
US	US 2005222174					A1 20051006								20040728				
PRIORIT	PRIORITY APPLN. INFO.:													A 20020130				
						WO 2	003-	JP82	8	1	₩ 2	0030	129					
OTHER S	MARPAT 139:164808																	

GI

01

The title compds. I [R1 is C1-4 alkyl; R2 is (1) Ph which may have a substituent such as amino, mono-C1-4 alkylamino, or di-C1-4alkyl- amino, (2) a heterocyclic group which may have a substituent such as amino, mono-C1-4 alkylamino, or di-C1-4 alkylamino, or the like; R3 is hydrogen or C1-4 alkyl; and R4 is C1-4 alkyl which may have a substituent such as C1-4 alkoxycarbonyl, carboxyl, mono-C1-4 alkylamino, or N-C1-4alkyl-N-C7-10 aralkylamino, or the like] are prepared The bioactivity of two compds. of this invention was demonstrated. Formulations are given.

IT 577781-05-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

(preparation of thienopyrimidines as gonadotropic hormone-releasing hormone antagonists)

RN 577781-05-6 HCAPLUS

CN Carbamic acid, [3-[[[4-(aminocarbonyl)phenyl]amino]carbonyl]-5-[4[[(ethylamino)carbonyl]amino]phenyl]-4-[[(2-methoxyethyl)methylamino]methy
l]-2-thienyl][(2,6-difluorophenyl)methyl]-, ethyl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 22 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:117811 HCAPLUS Full-text

ACCESSION NUMBER: DOCUMENT NUMBER:

138:153524

TITLE:

Preparation of indaneacetic acid derivatives for

treating diabetes, obesity, hyperlipidemia, and

atherosclerotic diseases

INVENTOR(S): Lowe, Derek B.; Wickens, Philip L.; Ma, Xin; Zhang,

Mingbao; Bullock, William H.; Coish, Philip D. G.; Mugge, Ingo A.; Stolle, Andreas; Wang, Ming; Wang, Yamin; Zhang, Chengzhi; Zhang, Hai-Jun; Zhu, Lei;

Tsutsumi, Manami; Livingston, James N.

PATENT ASSIGNEE(S):

SOURCE:

Bayer Corporation, USA PCT Int. Appl., 189 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.					KIND DATE				i	APPL	DATE							
	WO 2003011842				A1 20030			0213	1	WO 2		20020725						
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
								DK,										
								IN,										
								MD,										
								SE,										
			UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	ZW							
		RW:	GH,	GM,	KE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,	BG,
								EE,										

	PT,	SE,	SK,	TR, 1	BF,	ВJ,	CF,	CG,	CI	.,	CM,	GA,	GN,	GQ,	GW	, ML,	MR,			
	NE,	SN,	TD,	TG																
CA	2455620			A1	:	2003	0213		CA	20	02-	2455	620			20020	725			
US	20032163	A1		US 2002-205839							20020725									
US	6828335	B2																		
EP	1414809			A1 20040506					EP 2002-750297											
	R: AT,																PT,			
		SI,	LT,	LV,																
	1558905		Α									76								
	20055083						0331						34							
	20020115	02					0920						2			20020				
	531351			Α			0929						51			20020				
	1854118			Α			1101						4609			20020				
	20040003						0319									20040				
	2004DN00			Α			0401						8			20040				
	20040015			Α			0310									20040				
	20050753			A1			0407		US	20	04-	9491	19			20040	922			
	7112597						0926													
	20062057			A1		2006	0914		-				36			20060				
PRIORIT	Y APPLN.	INFO	.:										00P			20010				
									-				48P			20020				
											-		76			20020				
													39			20020	-			
						•							614			20020				
									US	20	04-	9491	19		АЗ	20040	922			
AMILIAN CA	\tip@r / e\ •		MADD	ייף ע	7 7 Q •	1 4 3 5	·) /i													

OTHER SOURCE(S): MARPAT 138:153524

GΙ

$$R^3$$
 R^2
 R^3
 R^2
 R^3
 R^2
 R^3
 R^3
 R^2
 R^3
 R^3

$$\begin{array}{c} \text{Et} \\ \text{CO}_2\text{H} \\ \\ \text{Ph} \\ \\ \\ \text{O} \end{array}$$

The title compds. I [R = H, alkyl; R1 = H, CO2R, cycloalkyl, etc.; R2 = H, halo, alkyl, etc.; R3 = H, alkyl, (un)substituted Ph; X = O, S; R4 = alkyl, cycloalkyl, Ph, etc.; R5 = H, halo, alkyl optionally substituted with oxo], useful in the treatment of diseases such as diabetes, obesity, hyperlipidemia, and atherosclerotic diseases, were prepared and formulated. Thus, reacting 2-(4-methyl-2-phenyl-1,3-oxazol-5-yl)ethanol with Me 5-hydroxy-2,3-dihydroinden-1-yl-2-butanoate (prepns. given) in the presence of DEAD and PPh3 in THF followed by hydrolysis of the ester afforded the acid II.

IT 496062-92-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

PT 1349843	T	20050930	PT	2001-994514		20011219
ES 2240558	Т3	20051016	ES	2001-1994514		20011219
US 2004072838	A1	20040415	US	2003-451295		20031031
PRIORITY APPLN. INFO.:			GB	2000-31103	Α	20001220
			WO	2001-US51056	W	20011219

OTHER SOURCE(S):

MARPAT 137:140514

GΙ

$$\begin{array}{c|c} & \text{Me} \\ & \text{Me} \\ & \text{Me} \\ & \text{MeO} \\ & & \text{N} \\ & & \text{N} \\ & & \text{N} \\ & & \text{II} \\ \end{array}$$

The title compds. [I; R1, R2 = H, alkyl; X2 = O, S, CH2; R3-R5 = H, alkyl, OMe, CF3, OCF3, CN, allyl, halo; Y = S, O; R25 = Me, OMe, CF3, halo; y = 0-5; R26 = substituted piperazino, piperidino, morpholino, etc.] which activate human peroxisome proliferator activated receptors (hPPARs) and are useful for the treatment of associated disorders such as cardiovascular disease and hypercholesteremia, were prepared Thus, reacting 4-(2-{4-{[4-(4-methoxyphenyl)-1-piperazinyl]methyl}-2-(4-trifluoromethylphenyl)-1,3-thiazol-5-yl}ethyl)-2-methylphenol (preparation given) with 2-trichloromethyl-2-propanol in the presence of NaOH pellets in acetone afforded 40% II. All exemplified compds. I were agonists of at least one hPPAR subtype (no data given).

IT 444612-13-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of thiazole and oxazole derivs. as activators of human peroxisome proliferator activated receptors)

RN 444612-13-9 HCAPLUS

CN Acetic acid, [2-methyl-4-[[[4-[[4-(3-thienyl)phenyl]methyl]-2-[4-(trifluoromethyl)phenyl]-5-thiazolyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 25 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2002:157746 HCAPLUS <u>Full-text</u>

DOCUMENT NUMBER:

136:200176

TITLE:

Preparation of 3-[(oxazolylalkoxy)phenyl]-2-

phenoxypropionic acid derivatives as PPAR agonists for treatment of diabetes mellitus and related conditions

INVENTOR(S):

Ardecky, Robert J.; Brooks, Dawn Alisa; Godfrey, Alexander Glenn; Jones, Sarah Beth; Mantlo, Nathan Bryan; McCarthy, James Ray; Michellys, Pierre-Yves; Rito, Christopher John; Tyhonas, John S.; Winneroski,

Leonard Larry; Xu, Yanping

PATENT ASSIGNEE(S):

Eli Lilly and Company, USA; Ligand Pharmaceuticals

SOURCE:

PCT Int. Appl., 217 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.				KIND DATE			4	APPL	ICAT	ION 1	NO.	DATE				
WO	2002	0163	32		A1	-	2002	0228	,	WO 2	001-	US22	617		2	0010	823
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	ΑŻ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	ΝZ,	PH,	PL,
		PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,
		US,	UZ,	VN,	YU,	ZA,	zw										
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	ΤZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG	
· CA	2418	134			A1		2002	0228		CA 2	2001-	2418	134		2	0010	823
	2001																
EP	1313																
	R:										IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,		RO,										
	2004										2002-						
US	2004									US 2	2003-	3431	87		2	0030	729
US	7176	224			В2		2007	0213									
PRIORIT	Y APP	LN.	INFO	.:						US 2	000-	2274	56P		P 2	0000	823
										WO 2	2001-	US22	617	1	₩ 2	0010	823
OTHER C	OHECE	191 .			MAD	рдπ	136.	2001	76								

OTHER SOURCE(S): MARPAT 136:200176

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

```
Title compds. I [wherein n = 2-4; R1 = H, (halo)alkyl, or Ph; R2 and R3 =
AB
     independently H, alkyl, cycloalkyl(alkyl), alkoxy, or aryl(alkyl); or R2 forms
     (tetrahydro)naphthyl together with the Ph to which they are bound; R4 = alkyl;
     R5 = independently H or (un)substituted (hetero)aryl, with provisos; R6 = H or
     (amino)alkyl; R7 and R8 = independently H, (cyclo)alkyl, (halo)alkoxy, or
     halo(alkyl); or R8 form benzodioxolyl together with the Ph to which they are
     bound; and pharmaceutically acceptable salts, solvates, and hydrates thereof]
     were prepared as agonists of peroxisome proliferator activated receptors
     (PPARs). For example, 2-[2-(3-bromophenyl)-5-methyloxazol-4-yl]ethanol was
     coupled with p-fluorophenyl boronic acid in the presence of PPh3, Pd(OAc)2,
     and Na2CO3 to give the biphenyl derivative (36%). Esterification with tosyl
     anhydride in the presence of pyridine and DMAP, followed by reaction with 3-
     (4-hydroxyphenyl)-2-methyl-2-phenoxypropionic acid Et ester in the presence of
     polystyrene bound 1,5,7-triazabicyclo[4.4.0]dec-5-ene and hydrolysis with
     NaOH, afforded II (24%). The latter bound to PPARα and PPARγ with IC50 values
     of 147 nM and 41 nM, resp., and activated the nuclear transcription factors
     huPPAR\alpha and huPPAR\gamma with cotransfection efficacies of 38% and 93%, resp.
     addition, HDLc serum levels increased by 40.4% in male transgenic mice dosed
     with 30 mg/kg of II, and glucose levels were normalized to 91% in male
     diabetic (db/db) mice dosed with 30 mg/kg of II. Thus, I are useful in the
     treatment and prevention of diabetes mellitus and related conditions.
     401468-55-1P, 2-Methyl-3-[4-[2-[5-methyl-2-(4-thiophen-2-
ΙT
     vlphenyl)oxazol-4-yl]ethoxy]phenyl]-2-phenoxypropionic acid
     401468-60-8P, 2-Methyl-3-[4-[2-[5-methyl-2-(3-thiophen-2-
     ylphenyl)oxazol-4-yl]ethoxy]phenyl]-2-phenoxypropionic acid
     401468-64-2P, 2-Methyl-3-[4-[2-[5-methyl-2-(3-thiophen-3-
     ylphenyl)oxazol-4-yl]ethoxy]phenyl]-2-phenoxypropionic acid
     401468-75-5P, 3-[3-Methoxy-4-[2-[5-methyl-2-(4-thiophen-2-
     ylphenyl)oxazol-4-yl]ethoxy]phenyl]-2-methyl-2-phenoxypropionic acid
     401468-81-3P, 2-Methyl-3-[4-[2-[5-methyl-2-(4-thiophen-2-
     ylphenyl)oxazol-4-yl]ethoxy]-3-propylphenyl]-2-phenoxypropionic acid
     401468-88-0P, 2-Methyl-3-[4-[2-[5-methyl-2-(4-thiophen-2-
     ylphenyl)oxazol-4-yl]ethoxy]naphthalen-1-yl]-2-phenoxypropionic acid
     401468-94-8P, 2-Methyl-3-[4-[2-[5-methyl-2-(4-thiophen-2-
     ylphenyl)oxazol-4-yl]ethoxy]phenyl]-2-(4-tert-butylphenoxy)propionic acid
     401468-95-9P, 2-Methyl-3-[4-[2-[5-methyl-2-(3-thiophen-2-
     ylphenyl)oxazol-4-yl]ethoxy]phenyl]-2-(4-tert-butylphenoxy)propionic acid
     401468-96-0P, 2-Methyl-3-[4-[2-[5-methyl-2-(3-thiophen-3-
     ylphenyl)oxazol-4-yl]ethoxy]phenyl]-2-(4-tert-butylphenoxy)propionic acid
     401469-00-9P, 2-(3-Fluorophenoxy)-2-methyl-3-[4-[2-[5-methyl-2-(4-
     thiophen-2-ylphenyl)oxazol-4-yl]ethoxy]phenyl]propionic acid
     401469-02-1P, 2-(3-tert-Butylphenoxy)-2-methyl-3-[4-[2-[5-methyl-2-
     (4-thiophen-2-ylphenyl)oxazol-4-yl]ethoxy]phenyl]propionic acid
     401469-04-3P, 2-(2-Fluorophenoxy)-2-methyl-3-[4-[2-[5-methyl-2-(4-
     thiophen-2-ylphenyl)oxazol-4-yl]ethoxy]phenyl]propionic acid
     401469-06-5P, 2-(4-Chlorophenoxy)-2-methyl-3-[4-[2-[5-methyl-2-(3-
     thiophen-2-ylphenyl)oxazol-4-yl]ethoxy]phenyl]propionic acid
     401469-10-1P, 2-(4-Cyclohexylphenoxy)-2-methyl-3-[4-[2-[5-methyl-2-
     (3-thiophen-2-ylphenyl)oxazol-4-yl]ethoxy]phenyl]propionic acid
     401469-14-5P, 2-(3,4-Dimethylphenoxy)-2-methyl-3-[4-[2-[5-methyl-2-
     (4-thiophen-2-ylphenyl)oxazol-4-yl]ethoxy]phenyl]propionic acid
     401469-17-8P, 2-Methyl-3-[4-[2-[5-methyl-2-(4-thiophen-2-
     ylphenyl)oxazol-4-yl]ethoxy]phenyl]-2-p-tolyloxypropionic acid
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401469-23-6P, 2-Methyl-3-[4-[2-[5-methyl-2-(4-thiophen-2ylphenyl)oxazol-4-yl]ethoxy]phenyl]-2-(4-trifluoromethoxyphenoxy)propionic acid 401469-28-1P, 2-[4-[2-[5-Methyl-2-(3-thiophen-2vlphenyl)oxazol-4-yl]ethoxy|benzyl]-2-phenoxybutyric acid 401469-30-5P, 2-Methyl-3-[4-[2-[5-methyl-2-(4-thiophen-2ylphenyl)oxazol-4-yl]ethoxy]phenyl]-2-(4-trifluoromethylphenoxy)propionic acid 401469-35-0P, 2-(3,4-Difluorophenoxy)-2-methyl-3-[4-[2-[5-1]]]methyl-2-(4-thiophen-2-ylphenyl)oxazol-4-yl]ethoxy]phenyl]propionic acid 401469-39-4P, 2-Methyl-3-[4-[2-[5-methyl-2-(4-thiophen-2vlphenyl)oxazol-4-yl]ethoxy]phenyl]-2-m-tolyloxypropionic acid .401469-43-0P, 2-(4-Fluorophenoxy)-2-methyl-3-[4-[2-[5-methyl-2-(4thiophen-2-ylphenyl)oxazol-4-yl]ethoxy]phenyl]propionic acid 401469-44-1P, 2-Methyl-3-[4-[2-[5-methyl-2-(4-thiophen-2ylphenyl)oxazol-4-yl]ethoxy]phenyl]-2-(3-trifluoromethylphenoxy)propionic acid 401469-49-6P, 2-(3-Methoxyphenoxy)-2-methyl-3-[4-[2-[5methyl-2-(4-thiophen-2-ylphenyl)oxazol-4-yl]ethoxy]phenyl]propionic acid 401469-53-2P, 2-(Benzo[1,3]dioxol-5-yloxy)-2-methyl-3-[4-[2-[5methyl-2-(3-thiophen-2-ylphenyl)oxazol-4-yl]ethoxy]phenyl]propionic acid 401469-57-6P, 2-[4-[2-[5-Methyl-2-(3-thiophen-2-ylphenyl)]] oxazol-4yl]ethoxy]benzyl]-2-phenoxyhexanoic acid 401469-62-3P, 2-(2-Methoxyphenoxy)-2-methyl-3-[4-[2-[5-methyl-2-(3-thiophen-2ylphenyl)oxazol-4-yl]ethoxy]phenyl]propionic acid 401469-65-6P, (R) - 2 - Methyl - 3 - [4 - [2 - [5 - methyl - 2 - (4 - thiophen - 2 - ylphenyl)] oxazol - 4 - (4 - thiophen - 2 - ylphenyl) oxazol - (4 - thiophen - 2 - ylphenyl) oxazol - 4 - (4 - thiophen - 2 - ylphenyl) oxazol - 4 - (4 - thiophen - 2 - ylphenyl) oxazol - 4 - (4 - thiophen - 2 - ylphenyl) oxazol - 4 - (4 - thiophen - 2 - ylphenyl) oxazol - 4 - (4 - thiophen - 2 - ylphenyl) oxazol - 4 - (4 - thiophen - 2 - ylphenyl) oxazol - 4 - (4 - thiophen - 2 - ylphenyl) oxazol - 4 - (4 - thiophen - 2 - ylphenyl) oxazol - 4 - (4 - thiophen - 2 - ylphenyl) oxazol - 4 - (4 - thiophen - 2 - ylphenyl) oxazol - 4 - (4 - thiophen - 2vl]ethoxy]phenyl]-2-p-tolyloxypropionic acid RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(PPAR agonist; preparation of oxazolylalkoxyphenylpropionic acid PPAR agonists by reacting toluenesulfonic acid oxazolylalkyl esters with hydroxyphenylpropanoates for treatment of diabetes mellitus and related conditions)

RN 401468-55-1 HCAPLUS

CN Benzenepropanoic acid, α -methyl-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- α -phenoxy- (9CI) (CA INDEX NAME)

RN 401468-60-8 HCAPLUS

CN Benzenepropanoic acid, α -methyl-4-[2-[5-methyl-2-[3-(2-thienyl)phenyl]-4-oxazolyl]ethoxyl- α -phenoxy- (9CI) (CA INDEX NAME)

RN 401468-64-2 HCAPLUS

CN Benzenepropanoic acid, α -methyl-4-[2-[5-methyl-2-[3-(3-thienyl)phenyl]-4-oxazolyl]ethoxy]- α -phenoxy- (9CI) (CA INDEX NAME)

RN 401468-75-5 HCAPLUS

CN Benzenepropanoic acid, 3-methoxy- α -methyl-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- α -phenoxy- (9CI) (CA INDEX NAME)

RN 401468-81-3 HCAPLUS

CN Benzenepropanoic acid, α -methyl-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- α -phenoxy-3-propyl- (9CI) (CA INDEX NAME)

RN 401468-88-0 HCAPLUS

CN 1-Naphthalenepropanoic acid, α -methyl-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- α -phenoxy- (9CI) (CA INDEX NAME)

PAGE 2-A

RN 401468-94-8 HCAPLUS

CN Benzenepropanoic acid, $\alpha-[4-(1,1-\text{dimethylethyl})\text{phenoxy}]-\alpha-$ methyl-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

RN 401468-95-9 HCAPLUS

CN Benzenepropanoic acid, $\alpha-[4-(1,1-\text{dimethylethyl})\text{phenoxy}]-\alpha-$ methyl-4-[2-[5-methyl-2-[3-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

RN 401468-96-0 HCAPLUS

CN Benzenepropanoic acid, $\alpha-[4-(1,1-\text{dimethylethyl})\text{phenoxy}]-\alpha-$ methyl-4-[2-[5-methyl-2-[3-(3-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

RN 401469-00-9 HCAPLUS

CN Benzenepropanoic acid, α -(3-fluorophenoxy)- α -methyl-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

RN 401469-02-1 HCAPLUS

CN Benzenepropanoic acid, α -[3-(1,1-dimethylethyl)phenoxy]- α -methyl-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

RN 401469-04-3 HCAPLUS.

CN Benzenepropanoic acid, α -(2-fluorophenoxy)- α -methyl-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

RN 401469-06-5 HCAPLUS

CN Benzenepropanoic acid, α -(4-chlorophenoxy)- α -methyl-4-[2-[5-methyl-2-[3-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

RN 401469-10-1 HCAPLUS

CN Benzenepropanoic acid, α -(4-cyclohexylphenoxy)- α -methyl-4-[2-[5-methyl-2-[3-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

RN 401469-14-5 HCAPLUS

CN Benzenepropanoic acid, α -(3,4-dimethylphenoxy)- α -methyl-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

Me
$$O-CH_2-CH_2$$
 $O-CH_2-CH_2$ Me Me

RN 401469-17-8 HCAPLUS

CN Benzenepropanoic acid, α -methyl- α -(4-methylphenoxy)-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

RN 401469-23-6 HCAPLUS

CN Benzenepropanoic acid, α -methyl-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- α -[4-(trifluoromethoxy)phenoxy]-(9CI) (CA INDEX NAME)

RN 401469-28-1 HCAPLUS

CN Benzenepropanoic acid, α -ethyl-4-[2-[5-methyl-2-[3-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- α -phenoxy- (9CI) (CA INDEX NAME)

RN 401469-30-5 HCAPLUS

CN Benzenepropanoic acid, α -methyl-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- α -[4-(trifluoromethyl)phenoxy]-(9CI) (CA INDEX NAME)

RN 401469-35-0 HCAPLUS

CN Benzenepropanoic acid, α -(3,4-difluorophenoxy)- α -methyl-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX

RN 401469-39-4 HCAPLUS

CN Benzenepropanoic acid, α -methyl- α -(3-methylphenoxy)-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

RN 401469-43-0 HCAPLUS

CN Benzenepropanoic acid, α -(4-fluorophenoxy)- α -methyl-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

RN 401469-44-1 HCAPLUS

CN Benzenepropanoic acid, α -methyl-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- α -[3-(trifluoromethyl)phenoxy]-(9CI) (CA INDEX NAME)

RN 401469-49-6 HCAPLUS

CN Benzenepropanoic acid, α -(3-methoxyphenoxy)- α -methyl-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

RN 401469-53-2 HCAPLUS

CN Benzenepropanoic acid, α -(1,3-benzodioxol-5-yloxy)- α -methyl-4-[2-[5-methyl-2-[3-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{S} \\ \text{Me} \end{array}$$

RN 401469-57-6 HCAPLUS

CN Benzenepropanoic acid, α -butyl-4-[2-[5-methyl-2-[3-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- α -phenoxy- (9CI) (CA INDEX NAME)

RN 401469-62-3 HCAPLUS

CN Benzenepropanoic acid, α -(2-methoxyphenoxy)- α -methyl-4-[2-[5-methyl-2-[3-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]- (9CI) (CA INDEX NAME)

RN 401469-65-6 HCAPLUS

CN Benzenepropanoic acid, α -methyl- α -(4-methylphenoxy)-4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]-, (α R)- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 26 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2002:157745 HCAPLUS Full-text

DOCUMENT NUMBER: 136:216740

TITLE: Preparation of oxazolyl-arylpropionic acid derivatives

and their use as PPAR agonists

INVENTOR(S): Brooks, Dawn Alisa; Godfrey, Alexander Glenn; Jones,

Sarah Beth; McCarthy, James Ray; Rito, Christopher

John; Winneroski, Leonard Larry, Jr.; Xu, Yanping

PATENT ASSIGNEE(S): Eli Lilly and Company, USA SOURCE: PCT Int. Appl., 249 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.					KIND DATE			APPLICATION NO.						DATE 				
WO	2002	0163	31		A1	-	2002	0228	1		2001-				2	0010	823	
	W:										BG,							
		co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
											KG,							
											MW,							
		PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	ΤZ,	UA,	UG,	
		US,	UZ,	VN,	YU,	ZA,	zw											
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	ΒE,	CH,	CY,	
											LU,							
				CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG		
	2418				A1		2002	0228		CA 2	2001-	2418	104		2	0010	823	
ΑU	2001	8465	9		Α		2002	0304		AU 2	2001-	8465	9		2	0010	823	
ΕP	1313	716			A1		2003	0528		EP 2	2001-	9637	33		2	0010	823	
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	, TR							
BR	2001	0134	09		Α		2003	0701		BR 2	2001-	1340	9		2	0010	823	
HU	2003	0085	7		A2		2003	1028		HU 2	2003-	857			2	0010	823	
JP	2004	5067	21		T		2004	0304		JP 2	2002-	5214	32		2	0010	823	
	5238				Α		2004	0924		NZ 2	2001-	5238	04		2	0010	823	
ZA	2003	0005	70		Α		2004	0421			2003-							
US	2004	0975	90		A1		2004			US 2	2003-	3434	76		2	0030	129	
US	6930	120			В2		2005								_			
	2003						2005				2003-					0030		
	2003				Α		2003				2003-				_	0030		
US	2005	2455	84		A1		2005				2005-				_	0050		
ORIT	Y APP	LN.	INFO	.:						US 2	2000-	2272	34P		P 2	0000	823	

US 2003-343476 CASREACT 136:216740; MARPAT 136:216740

OTHER SOURCE(S):

GΙ

$$R2$$
(CH2) nWY
 $R3$
 $COOR5$
 $R4$
 I

Title compds. [I; n = 2, 3, 4; W = CH2, CH(OH), CO, O; R1 = aryl, heteroaryl, AB cycloalkyl, heterocycloalkyl, arylalkyl, heteroarylalkyl, cycloalkylalkyl, (CH3)3C; R2 = H, alkyl haloalkyl, C6H5; Y = thiophen-2,5-diyl, phenylene; R3 = alkyl, haloalkyl; R4 = C6H5, naphthyl, 1,2,3,4-tetrahydronaphthyl, quinolyl, pyridyl, benzo[1,3]dioxol-5-yl; R5 = H, alkyl, aminoalkyl], stereoisomers, pharmaceutically acceptable salts, solvates and hydrates thereof are prepared for modulating a peroxisome proliferator-activated receptor (PPAR), particularly in the treatment of diabetes mellitus, cardiovascular disease, and animal syndrome X disease. Thus, the title compound II was prepared and tested for activity of lowering triglyceride serum level in mice, at 41.3%. IT

401790-85-0P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of oxazolyl-arylpropionic acid derivs. and their use as PPAR agonists)

401790-85-0 HCAPLUS RN

Benzenepropanoic acid, 4-[2-(2-cyclohexyl-5-methyl-4-oxazolyl)ethoxy]-CN α -methyl- α -[3-(3-thienyl)phenoxy]- (9CI) (CA INDEX NAME)

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

HCAPLUS COPYRIGHT 2007 ACS on STN L13 ANSWER 27 OF 32 2001:822158 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER:

136:263035

TITLE:

Reactions of thiobenzoylketene S, N-acetals with silyl enol ethers of cyclic ketones in the presence of desilylating reagents: formation and desulfurization

of thienolactams

AUTHOR(S):

Lee, Jong Seok; Lee, Dong Joon; Kim, Bo Sung; Kim,

Kyongtae

CORPORATE SOURCE:

School of Chemistry and Molecular Engineering, Seoul

National University, 151-742, S. Korea

SOURCE:

Journal of the Chemical Society, Perkin Transactions 1

(2001), (21), 2774-2780

CODEN: JCSPCE; ISSN: 1472-7781

PUBLISHER:

Royal Society of Chemistry

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 136:263035

Medium-sized thienolactams can be directly prepared from thiobenzoylketene S,N-acetals, Hg(OAc)2, and silyl enol ethers of cyclic ketones, and either TBAF or TASF. However, by adding either water or alc. to the foregoing mixture, 3-methylamino-5-phenylthiophenes, in which the ω-position of longchain alkanoic acids and alkanoic esters are bonded to C-2 of the thiophene ring, can be obtained albeit in low yields. Sequential treatment of the thienolactams with Raney nickel and Adam's catalyst results in completely reductive desulfurization of thienolactam mols.

404887-70-3P TΨ

RL: SPN (Synthetic preparation); PREP (Preparation)

(reactions of thiobenzoylketene S,N-acetals with silyl enol ethers of cyclic ketones in the presence of desilylating reagents)

404887-70-3 HCAPLUS RN

Benzoic acid, 2-[2-[3-(methylamino)-5-phenyl-2-thienyl]ethyl]- (9CI) (CA CN INDEX NAME)

REFERENCE COUNT:

THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS 35 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER:

L13 ANSWER 28 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN 2001:167982 HCAPLUS Full-text

DOCUMENT NUMBER:

134:207811

TITLE:

Preparation of biaryloxa(thia)zole derivatives as PPAR

modulators

INVENTOR(S):

Brooks, Dawn A.; Rito, Christopher J.; Shuker, Anthony

J.; Dominianni, Samuel J.; Warshawsky, Alan M.;

Gossett, Lynn S.; Matthews, Donald P.; Hay, David A.; Ardecky, Robert J.; Michellys, Pierre-Yves; Tyhonas,

John S.

PATENT ASSIGNEE(S):

Eli Lilly and Company, USA; Ligand Pharmaceuticals

Incorporated

SOURCE:

PCT Int. Appl., 232 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

Diigita

PATENT INFORMATION:

PA	PATENT NO.					KIND DA			APPLICATION NO.				DATE				
		0161	20		A 1		2001	0308					3358			20000	823
WO	2001 W:									DE	ם פ	ממ	, BY,	D 7	CA	СП	CN
	w:	-						-			-	-	, GD,				
													, GD,				
													, NZ,				
		•		-			-	-			-	-	, NZ,				
				-	-		BY,				-			00,	03	, 02,	V IN ,
	DW.		•								-	•	, ZW,	λጥ	BE	Сп	CV
	KM:												, NL,				
		•		•	-			-					, TD,		00	, 51,	ъо,
CA	2382	966	co,	CI,	Δ1	GA,	2001	011, 0308	1111,	CΔ	2000	-238	2966 2966	.10		20000	823
	1206				Δ1		2001	0522		EP	2000	-959	401			20000	823
	1206										2000	,,,,				20000	023
n.										GF	. TT	. LT	, LU,	NL.	SE	. MC.	PT.
	1						RO,					,	,,	,		,,	,
пс	6417	212	,	•	B1		2002	0709		US	2000	-644	457			20000	823
JP.	2003	5083	89		Т		2003	0304		JΡ	2001	-519	687 401 401 401		•	20000	823
AΤ	2520	91	٠.		T		2003	1115		AΤ	2000	-959	401			20000	823
PТ	1206	457			T		2004	0331		PT	2000	-959	401			20000	823
ES	2204	684			Т3		2004	0501		ES	2000	-959	401			20000	823
US	2003	0455	58		A1		2003	0306		US	2002	-121	373			20020	411
	6610				В2		2003	0826									
US	2004	0190	90		A1		2004	0129		US	2003	-434	425			20030	507
US	6825	222			В2		2004	1130									
PRIORIT	Y APP	LN.								US	1999	-151	162P		P	19990	827
													457				
													3358				
										US	2002	-121	373		АЗ	20020	411
OWILED C	OHECE	101 .			MΛD	ית אכ	13/1.	2078	11								

OTHER SOURCE(S):

MARPAT 134:207811

GI

AB Title compds. (I) [wherein n=2-4; V=0 or S; W=0, S, or SO2; R1=H, alkyl, Ph, or CF3; R2= independently H, (cyclo)alkyl, cycloalkylalkyl,

aryl(alkyl), or together with the Ph to which they are bound form naphthyl or 1,2,3,4-tetrahydronaphthyl; R3 = independently H, (cyclo)alkyl, cycloalkylalkyl, or aryl(alkyl); R4 = independently H, alkyl, aryl, or benzyl; R5 = independently H or (un)substituted (hetero)aryl, provided that at least one R5 = (un) substituted (hetero) aryl; and R6 = H or (amino) alkyl] were prepared as are modulators of peroxisome proliferator activated receptors (PPARs) and are useful in the treatment of type II diabetes and cardiovascular diseases. For example, a mixture of the toluene-4-sulfonic acid 2-(2-(biphenyl-4-yl)-5-methyloxazol-4-yl)ethyl ester and 2-(3-hydroxyphenoxy)-2methylpropanoic acid Et ester was heated at 55°C in DMF for 18 h and the intermediate deesterified using NaOH in EtOH and THF to afford the title compound II. II bound to human PPARa and PPARy with IC50 values of 97 nM and 532 nM, resp., and activated human PPAR α and PPAR γ with efficacies of 97% and 70%, resp. In assays evaluating triglyceride and cholesterol levels in mice transgenic for human apoAI, administration of II reduced triglyceride serum levels by 60.5% and increased HDLc serum levels by 204%. Glucose normalization of 95% was attained in male diabetic (db/db) mice dosed with II. 328918-32-7P 328918-74-7P 328920-12-3P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of biaryl oxa(thia)zole PPAR modulators by coupling biaryloxazolylalkyl tosylates with alcs. or thiols)

RN 328918-32-7 HCAPLUS

IT

CN Propanoic acid, 2-methyl-2-[4-[2-[5-methyl-2-[4-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]phenoxy]- (9CI) (CA INDEX NAME).

RN 328918-74-7 HCAPLUS

CN Propanoic acid, 2-methyl-2-[4-[5-methyl-2-[4-(5-methyl-2-thienyl)phenyl]-4-oxazolyl]ethoxy]phenoxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{O} \\ \text{Me} \end{array}$$

RN 328920-12-3 HCAPLUS

CN Benzenepropanoic acid, α -methyl- α -[4-[2-[5-methyl-2-[3-(2-thienyl)phenyl]-4-oxazolyl]ethoxy]phenoxy]- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 29 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1996:134085 HCAPLUS Full-text

DOCUMENT NUMBER:

124:178874

TITLE:

Methine and azomethine dyes based on naphthoquinones

and their application to nonlinear optics

INVENTOR(S):

Beckmann, Stefan; Etzbach, Karl-Heinz; Sens, Ruediger

PATENT ASSIGNEE(S):

BASF A.-G., Germany

SOURCE:

Ger. Offen., 12 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4422333	A1	19960104	DE 1994-4422333	19940627
WO 9600409	A1	19960104	WO 1995-EP2328	19950616
W: JP, KR, US				
RW: AT, BE, CH,	DE, DK	, ES, FR,	GB, GR, IE, IT, LU, M	MC, NL, PT, SE
EP 767927	A1	19970416	EP 1995-924250	19950616
EP 767927	B1	19980902	•	
R: AT, BE, CH,	DE, DK	, ES, FR,	GB, GR, IE, IT, LI,	NL, PT, SE
JP 10502184	T	19980224	JP 1995-502758	19950616
AT 170638	T	19980915	AT 1995-924250	19950616
US 5756753	Α	19980526	US 1996-750846	19961224
PRIORITY APPLN. INFO.:			DE 1994-4422333	A 19940627
			WO 1995-EP2328	W 19950616

OTHER SOURCE(S):

MARPAT 124:178874

GΙ

$$XZ$$
 A
 $C(CN)_2$
 B
 R^3
 I

AB The dyes (I; R1, R2, R3 = H, C1-4-alkyl, C5-7-cycloalkyl; X = 5- or 6-membered carbo- or heterocyclic ring; Z = N, CH, CH:CHCH; rings A and B may be benzoannellated) may be incorporated into optical nonlinear materials. I have good hyperpolarizability, thermal stability, and processability. Thus, 4- (dimethylamino)cinnamaldehyde was condensed with 1-(dicyanomethyl)naphthalene

to give a trimethine dye with second-order susceptibility >50 times that of pnitroaniline.

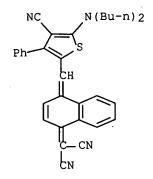
173982-32-6P IT

> RL: IMF (Industrial manufacture); NUU (Other use, unclassified); PREP (Preparation); USES (Uses)

(preparation of methine and azomethine dyes based on naphthoguinones for nonlinear optics)

173982-32-6 HCAPLUS RN

Propanedinitrile, [4-[[4-cyano-5-(dibutylamino)-3-phenyl-2-CN thienyl]methylene]-1(4H)-naphthalenylidene]- (9CI) (CA INDEX NAME)



L13 ANSWER 30 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1992:194074 HCAPLUS Full-text

DOCUMENT NUMBER:

116:194074

TITLE:

Furans and thiophenes from etacrynic acid

AUTHOR(S):

Goerlitzer, Klaus; Boemeke, Michael

CORPORATE SOURCE:

Inst. Pharm. Chem., Tech. Univ. Braunschweig,

Braunschweig, 3300, Germany

SOURCE:

Archiv der Pharmazie (Weinheim, Germany) (1992),

325(1), 9-12

CODEN: ARPMAS; ISSN: 0365-6233

DOCUMENT TYPE:

Journal

LANGUAGE:

German

OTHER SOURCE(S):

CASREACT 116:194074

For diagram(s), see printed CA Issue. GT

R1COCH2CHEtCOR [I, R = C6H2(OCH2CO2H)C12-4,2,3, R1 = H, Me, RCOCHEtCH2] react AΒ with polyphosphoric acid (PPA) to yield the furans II (X = 0) and with P2S5 to the thiophenes II (X = S). I (R1 = OH) cyclizes with PPA to form the α,β unsatd. butyrolactone. I (R1 = OH) is reduced by NaBH4 chemo- and diastereoselectively to give the γ-hydroxy carboxylic acid (3RS, 4RS)-HOCHRCHEtCH2CO2H which is cyclized to III by dehydration with PPA. II (X = SO2) are obtained from II (X = S) by oxidation with magnesium monoperoxyphthalate. Under the same conditions II (X = 0, R1 = Me) is cleaved to yield (Z)-MeCOCH:CEtCOR, which tautomerizes slowly forming (E)-MeCOCH2C(COR): CHMe.

ΙT 139519-99-6P

> RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

139519-99-6 HCAPLUS RN

Acetic acid, [4-[5-[2-[4-(carboxymethoxy)-2,3-dichlorobenzoyl]butyl]-3-CN ethyl-2-thienyl]-2,3-dichlorophenoxy]- (9CI) (CA INDEX NAME)

L13 ANSWER 31 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1987:571992 HCAPLUS Full-text

DOCUMENT NUMBER:

107:171992

TITLE:

Use of thiophenes as pH indicators, especially in a

nonenzymic glucose test

INVENTOR(S):

Heidenreich, Holger; Wolfrum, Gerhard; Wehling, Klaus;

Hugl, Herbert

PATENT ASSIGNEE(S):

Miles Laboratories, Inc., USA

SOURCE:

Ger. Offen., 9 pp.

DOCUMENT TYPE:

CODEN: GWXXBX

DOCUMENT I

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
					-
DE 3541097	A1	19870527	DE 1985-3541097	1985112	1
EP 248112	A2	19871209	EP 1986-115597	1986111	1
EP 248112	A 3	19890322			
R: DE, FR, GB,	IT			•	
AU 8665185	Α	19870528	AU 1986-65185	1986111	4
AU 595257	B2	19900329			
JP 62121362	Α	19870602	JP 198 <u>6</u> -273077	1986111	8
PRIORITY APPLN. INFO.:			DE 1985-3541097	A 1985112	1
GI					

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Thiophene derivs. I [R1, R2 = H, (substituted) alkyl, cycloalkyl, aralkyl, or R1NR2 = ring; R3 = leaving group; R4-R9 = chromogenic groups; n = 0, 1] are pH indicators which are colorless in alkaline and colored in acid solution, with a transition point near neutrality. They can be used for determination of sugars, which form complexes with borate or alkaline earth hydroxides with release of H+. I [R1R2 = (CH2CH2)2O; R3 = morpholino; R4-R8 = H; R9 = 4-MeO) (II) was prepared by reaction of 2-morpholino-3,4-diphenylthiophene (prepared by reaction of phenylacetic acid thiomorpholide with phenacyl bromide and cyclization) with 4-dimethylaminobenzaldehyde, refluxing in 70% HClO4, and refluxing the product in EtOH-morpholine (1:1). II changed from colorless to

dark blue over the pH range 9.8-7.3. II was dissolved in N-methylpyrrolidone, mixed 1:1 with pH borate buffer (pH 9), and the pH was adjusted to 9.0 with 1N HCl; the final II concentration was 1.25 mM. This reagent was used to determine glucose concentration over the range 0.5-5.0 g/100 mL from the absorbents at 600 nm.

IT 110711-81-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as pH indicator for nonenzymic glucose determination)

RN 110711-81-4 HCAPLUS

CN Propanenitrile, 3-[[4-[[3,4-bis(2-chloro-4-methylphenyl)-5-(4-methyl-1-piperazinyl)-2-thienyl]phenoxymethyl]-3-chlorophenyl]ethylamino]- (9CI) (CA INDEX NAME)

Me

$$\begin{array}{c}
\text{C1} \\
\text{N} \\
\text{C1} \\
\text{C1}
\end{array}$$
 $\begin{array}{c}
\text{Et} \\
\text{N} \\
\text{CH}_2 - \text{CH}_2 - \text{CN}$

L13 ANSWER 32 OF 32 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1973:85953 HCAPLUS Full-text

DOCUMENT NUMBER:

78:85953

TITLE:

Electrophotographic spectral sensitizers

INVENTOR(S):

Depoorter, Henri; Moelants, Felix Jan Agfa-Gevaert A.-G.

PATENT ASSIGNEE(S): SOURCE:

Ger. Offen., 43 pp.

CODEN: GWXXBX

DOCUMENT TYPE:

Patent German

LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
				-	
DE 2215829	A	19721019	DE 1972-2215829		19720330
US 3764317	Α	19731009	US 1972-236967		19720322
GB 1379755	Α	19750108	GB 1971-9094		19720323
BE 781664	A2	19721005	BE 1972-3916		19720405
PRIORITY APPLN. INFO.:			GB 1971-9094	Α	19710408

AB Sensitizers (I) for organic and inorg. photoconductors were prepared, where R2N = Et2N, morpholino, or piperidino and Y = (CH:CH)nCH+Ar, CH:Q, or (CH:CH)mQ1 (Q = N-containing heterocycle or its quaternary salt; Q1 = quaternary heterocycle; n = 0,1,2; m = 1,2; Ar = substituted Ph or thienyl). Thus, a mixture of 2-morpholino-3,4-diphenyl-5-formylthiophene and 1-phenyl-3-carboxy-5-pyrazolone was refluxed in MeOCH2CH2OH to give pyrazolone sensitizer

II [38215-21-3], λ maximum 536 nm (MeOH). In another example, a mixture of 2-morpholino-3,4-diphenylthiophene, 4-HCOC6H4N(CH2CO2H)2, and HClO4 was refluxed in MeOH to give carbonium sensitizer III [38215-22-4], λ maximum 573 nm(CH2Cl2). Electrophotog. compns. containing I are also described. 38215-22-4

RL: USES (Uses)

(photog. sensitization maximum of)

RN 38215-22-4 HCAPLUS

CN Methanaminium, 1-carboxy-N-(carboxymethyl)-N-[4-[[5-(4-morpholinyl)-3,4-diphenyl-2-thienyl]methylene]-2,5-cyclohexadien-1-ylidene]-, perchlorate (9CI) (CA INDEX NAME)

CM 1

ΙT

CRN 47810-22-0 CMF C31 H29 N2 O5 S

$$\begin{array}{c|c}
 & S \\
 & Ph
\end{array}$$

$$\begin{array}{c}
 & CH \\
 & CH_2 - CO_2H \\
 & CH_2 - CO_2H
\end{array}$$

CM 2

CRN 14797-73-0 CMF Cl O4

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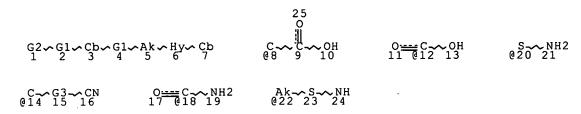
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RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

L8 116215 SEA FILE=REGISTRY SSS FUL L6

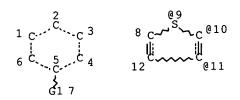
L9 STR ·



REP G1=(0-1) A
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REP G3=(0-5) C
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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 25

STEREO ATTRIBUTES: NONE L11 STR



VAR G1=9/10/11 NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

L12	159	SEA FILE=REGISTRY SUB=L8 SSS FUL L9 AND L11
L13		SEA FILE=HCAPLUS ABB=ON PLU=ON L12
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		NATHAN BRYAN"/AU)
L15	4115	SEA FILE=HCAPLUS ABB=ON PLU=ON ("WANG XIAODONG"/AU OR "WANG
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L16	349	SEA FILE=HCAPLUS ABB=ON PLU=ON ("ZHU GUOXIAN"/AU OR "ZHU
		GUOXIN"/AU) OR ZHU G ?/AU
L17	5	SEA FILE=HCAPLUS ABB=ON PLU=ON L14 AND L15 AND L16
L18	21	SEA FILE=HCAPLUS ABB=ON PLU=ON L14 AND (L15 OR L16)

L19
188 SEA FILE=HCAPLUS ABB=ON PLU=ON L15 AND L16
L20
5 SEA FILE=HCAPLUS ABB=ON PLU=ON L19 AND PPAR
L21
8707 SEA FILE=HCAPLUS ABB=ON PLU=ON "PEROXISOME PROLIFERATOR-ACTIV ATED RECEPTORS"/CV
L22
4 SEA FILE=HCAPLUS ABB=ON PLU=ON L19 AND L21
L23
19 SEA FILE=HCAPLUS ABB=ON PLU=ON (L17 OR L18 OR L20 OR L22)
NOT L13

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=> d ibib abs hitstr 123 1-19

L23 ANSWER 1 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2006:861877 HCAPLUS Full-text

TITLE: Tetrahydro naphthyridine as inhibitors of cholesteryl

ester transfer protein

AUTHOR(S): Parthasarathy, Saravanan; Fernandez, Maria-Carmen;

Mateo, Ana I.; Escribano, Ana; Martin de la Nava, Eva

M.; Wang, Xiaodong; Cockerham, Sandra L.;

Beyer, Thomas P.; Schmidt, Robert J.; Cao, Guoging;

Stephenson, Gregory; Mantlo, Nathan B.

CORPORATE SOURCE: Discovery Chemistry Research & Technology, Eli Lilly

and Company, Indianapolis, IN, 46285, USA

SOURCE: Abstracts of Papers, 232nd ACS National Meeting, San

Francisco, CA, United States, Sept. 10-14, 2006 (2006), MEDI-423. American Chemical Society: Washington, D.

C.

CODEN: 69IHRD

DOCUMENT TYPE: Conference; Meeting Abstract; (computer optical disk)

LANGUAGE: English

Cholesteryl ester transfer protein (CETP) is a plasma glycoprotein that mediates the transfer of cholesteryl ester from high-d. lipoprotein (HDL) to low-d. lipoprotein (LDL) and very low-d. lipoprotein (VLDL) with a reciprocal exchange of triglyceride. Recently, small-mol. CETP inhibitors have been shown to raise HDL cholesterol and slow the progression of atherosclerosis in animal models and humans. In a continuation of our effort in the atherosclerosis arena, we discovered a series of heteroarom. fused piperidines as CETP inhibitors. Herein we describe our SAR effort for a novel series 1,5-naphthyridines as CETP inhibitors, within this series we examined the structure-activity-relationships depicted in I. This effort lead to the identification of II with in vitro human plasma CETP inhibitory activity (IC50) in the 10-8 M range. The in vitro and in vivo SAR of this series will be described.

L23 ANSWER 2 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2006:100336 HCAPLUS Full-text

DOCUMENT NUMBER: 144:170892

TITLE: Preparation of tetrahydroquinoline derivatives as

cholesterol ester-exchanging protein inhibitors for

treating dyslipidemia and atherosclerosis

INVENTOR(S): Escribano, Ana Maria; Fernandez, Maria Carmen;

Mantlo, Nathan Bryan; Mateo-Herranz, Ana Isabel; De La Nava, Eva Maria Martin; Wang,

Xiaodong

PATENT ASSIGNEE(S): Eli Lilly and Company, USA

SOURCE: PCT Int. Appl., 110 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT	KIN		DATE		APPLICATION NO.						DATE				
WO 2006	012093	-			2006	0202							2	0050	622
W:															
	CN, CO														
	GE, GH		•	•	•	•						•	-	-	
	LC, LK				-										
	NG, NI														
	SL, SM		TJ,	TM,	TN,	TK,	TT,	TZ,	, UA,	UG,	05,	04,	vc,	V IN ,	10,
	ZA, ZM	,										65	C D		
RW:	AT, BE														
	IS, IT														
	CG, CI														
	KE, LS	, MW,	ΜZ,	NA,	SD,	SL,	SZ,	ΤŻ	, UG,	ZM,	ZW,	AM,	ΑZ,	BY,	KG,
	KZ, MD	, RU,	ТJ,	TM											
AU 2005	267436		A1		2006	0202		AU :	2005-2	2674	36		2	0050	622
CA 2570	688		A1		2006	0202		CA :	2005-2	2570	688		2	0050	622
PRIORITY APP	LN. INF	o.:						US :	2004-	5827	08P		P 2	0040	624
								US :	2004-	6272	41P		P 2	0041	112
			•				US :	2005-	6648	62P		P 2	0050	324	
							2005-1					0050	622		
OTHER SOURCE	OTHER SOURCE(S):					MARPAT 144:17089									

OTHER SOURCE(S):

GI

Tetrahydroquinoline derivs. (shown as I; variables defined below; e.g. AB (2R,4S)-4-[[3,5-bis(trifluoromethyl)benzyl](2-propyl-2H-tetrazol-5- yl)amino]-2-ethyl-6-trifluoromethyl-3,4-dihydro-2H-quinoline-1-carboxylic acid iso-Pr ester (shown as II)) their pharmaceutical compns. and methods of use are disclosed. Although the methods of preparation are not claimed, prepns. and/or characterization data for .apprx.40 examples of I are included. For example, II was prepared in 11 steps involving the following intermediates:

(R)-3-aminopentanenitrile methanesulfonate (94, 77, 82 % for substeps), (3R)-3-[(4-trifluoromethylphenyl)amino]pentanenitrile (98 %), (3R)-3-[(4trifluoromethylphenyl)amino]pentanamide (83 %), [(3R)-3-[(4trifluoromethylphenyl)amino]pentanoyl]carbamic acid benzyl ester (96 %), ((2R,4S)-2-ethyl-6-trifluoromethyl-1,2,3,4- tetrahydroquinolin-4-yl)carbamic acid benzyl ester (98 %), (2R,4S)-4-[(benzyloxycarbonyl)amino]-2-ethyl-6trifluoromethyl-3,4-dihydro-2H-quinoline-1-carboxylic acid iso-Pr ester (100 %), (2R,4S)-4-amino-2- ethyl-6-trifluoromethyl-3,4-dihydro-2H-quinoline-1carboxylic acid iso-Pr ester (100 %), (2R,4S)-4-[[3,5bis(trifluoromethyl)benzyl]amino]-2-ethyl-6- trifluoromethyl-3,4-dihydro-2Hquinoline-1-carboxylic acid iso-Pr ester (76 %), (2R,4S)-4-[[3,5bis(trifluoromethyl)benzyl](cyano)amino]-2-ethyl-6- trifluoromethyl-3,4dihydro-2H-quinoline-1-carboxylic acid iso-Pr ester (72 %), and (2R,4S)-4-[[3,5-bis(trifluoromethyl)benzyl](1H-tetrazol-5- yl)amino]-2-ethyl-6trifluoromethyl-3,4-dihydro-2H-quinoline-1-carboxylic acid iso-Pr ester (100 %). For I: n = 0-3; q = 0-4; Y is a bond, C:O, or -S(0)t (t = 0-2); R1 = hydroxy, C1-C6 alkyl, aryl, C2-C6 alkenyl, C1-C6 haloalkyl, C1-C6 alkylheterocyclic, C3-C8 cycloalkyl, C1-C6 alkylcycloalkyl, C1-C6 alkylaryl, heterocyclyl, C1-C6 alkyl alc., C1-C6 alkoxy, aryloxy, -OC2-C6 alkenyl, -OC1-C6 haloalkyl, -OC1-C6 alkylheterocyclic, -OC3-C8 cycloalkyl, -OC1-C6 alkylcycloalkyl, -NR7R8 and -OC1-C6 alkylaryl, -O-heterocyclic, -OC1-C6 alkylheterocyclic, C1-C6 alkyl-O-C(O)NR7R8, C1-C6 alkyl-NR7C(O)NR7R8, and C0-C6 alkylCOOR11. R2a and R2b = H, hydroxy, halo, oxo, C1-C6 alkyl, C2-C6 alkenyl, C2-C6 alkynyl, C1-C6 alkoxy, C1-6 haloalkyl, CONR11R12, -NR11SO2R12, -NR11COR12, C0-C6 alkylNR11R12, C0-C6 alkylCOR11, C0-C6 alkylCOOR11, cyano, nitro, C0-C6 alkylcycloalkyl, Ph, C0-C6 alkylaryl, heterocyclyl, C3-C8 cycloalkyl, and C1-C6 haloalkyl; R3a and R3b = H, halo, C1-C6 alkyl, C2-C6 alkene, C2-C6 alkynyl, C1-C6 alkoxy, and C1-C6 haloalkyl; R4 = -NR4aR4b; R5 = H, hydroxy, halo, C1-C6 alkyl, C2-C6 alkenyl, C2-C6 alkynyl, et al.; R6 = H, C1-C6 alkyl, C2-C6 alkenyl, hydroxy, COR7, C1-C6 alkoxy, aryloxy, et al.; addnl. details including provisos are given in the claims. 30 Mg/kg doses of 8 examples of I in mice caused 120-226 % increases in HDL-cholesterol. THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 2

L23 ANSWER 3 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2006:11309 HCAPLUS Full-text

DOCUMENT NUMBER:

144:108328

TITLE:

Preparation of benzo[b]azepines and related compounds

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

as inhibitors of cholesterol ester transfer protein

for treating dyslipidemia

INVENTOR(S):

Chen, Xinchao; Cioffi, Christopher Lawrence; Dinn, Sean Richard; Escribano, Ana Maria; Fernandez, Maria Carmen; Fields, Todd; Herr, Robert Jason; Mantlo,

Nathan Bryan; De la Nava, Eva Maria Martin;

Mateo-Herranz, Ana Isabel; Parthasarathy, Saravanan;

Wang, Xiaodong

PATENT ASSIGNEE(S):

Eli Lilly and Company, USA

SOURCE: PCT Int. Appl., 298 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE			
WO 2006002342	A1 20060105	WO 2005-US22389	20050623			
W: AE, AG, AL,	AM, AT, AU, AZ,	BA, BB, BG, BR, BW, BY,	BZ, CA, CH,			
		DM, DZ, EC, EE, EG, ES,				

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             SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
             ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
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             KZ, MD, RU, TJ, TM
                                             AU 2005-267436
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                                                                     20050622
                                             AU 2005-258241
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PRIORITY APPLN. INFO.:
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                                             WO 2005-US22389
                                                                     20050623
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OTHER SOURCE(S):

MARPAT 144:108328

GΙ

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Benzo[b]azepines and related compds. (shown as I; variables defined below; AΒ e.g. [3,5-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-7-methyl-8-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-7-methyl-8-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-7-methyl-8-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-7-methyl-8-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-7-methyl-8-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-7-methyl-8-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-7-methyl-8-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-7-methyl-8-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-7-methyl-8-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-7-methyl-8-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-7-methyl-8-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-7-methyl-8-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-7-methyl-8-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-7-methyl-8-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-7-methyl-8-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-7-methyl-8-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-7-methyl-8-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-8-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-8-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-8-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-8-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-8-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-8-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-8-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-8-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-8-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-8-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-8-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-8-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-8-bis(trifluoromethyl)benzyl][(S)-1-cyclopentylmethyl-8-bis(trifluoromethyl)benzylmethylbenzylmethylbenzylmethylbenzylmethylbenzylmethylbenzylmethylbenzylmethylbenzylmethylbenzylmethylbenzylmethylbenzylmethylbenzylmethylbenzylmethylbenzylmethylbenzylmethylbenzylmtrifluoromethyl-2,3,4,5-tetrahydro-1H-benzo[b]azepin-5-yl](2-methyl-2Htetrazol-5-yl)amine (shown as II)) and their pharmaceutical compns. and methods of use are disclosed. Although the methods of preparation are not claimed, prepns. and/or characterization data for .apprx.200 examples of I are included. For example, II was prepared in 19 steps (>99, 95, 99, 92, >99, 96, 83, 87, 80, 63, 76, 85, >99, 98, >99, 99 and 70% yields, resp.) starting with preparation of Me 2-nitro-4-trifluoromethylbenzoate from the acid. I: n = 0-3; m = 0-3; p is 1 or 2; q is 0-4; Y is a bond, C:0, or S(0)t; wherein t = 0-2; R1 = hydroxy, C1-C6 alkyl, aryl, C2-C6 alkenyl, C1-C6 haloalkyl, et al.; each R2 is bound only to a C atom and is H, hydroxy, halogen, oxo, C1-C6 alkyl, C2-C6 alkenyl, C2-C6 alkynyl, et al.; R3a and R3b = H, halogen, C1-C6 alkyl, C2-C6 alkenyl, C2-C6 alkynyl, C1-C6 alkoxy, and C1-C6 haloalkyl; R4 = -NR4aR4b wherein R4a is a heterocyclic, C1-C6 alkylheterocyclic, or C2-C6 alkenylheterocyclic group; and R4b = C1-C6 alkylaryl, C2-C6 alkenylaryl, C2-C6 alkynylaryl, C1-C6 alkylheterocyclic, C2-C6 alkenylheterocyclic, C1-C6 alkylcycloalkyl, et al.; R5 = H, hydroxy, halogen, C1-C6 alkyl, C2-C6 alkenyl, C2-C6 alkynyl, C1-C6 alkoxy, aryloxy, et al.; R6 = H, C1-C6 alkyl, C2-C6 alkenyl, hydroxy, COR7, C1-C6 alkoxy, aryloxy,

-OC2-C6 alkenyl, -OC1-C6 haloalkyl, C1-C6 alkylNR7R8, C3-C8 cycloalkyl, heterocyclic, aryl, C1-C6 alkyl-O-C(O)NR7R8, C1-C6 alkyl-NR7C(O)NR7R8 and C1-C6 alkylcycloalkyl; addnl. details including provisos are given in the claims. The ability of 37 examples of I to elevate HDL cholesterol levels was

determined

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 4 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2005:1130646 HCAPLUS Full-text

DOCUMENT NUMBER:

143:405809

TITLE:

Preparation of heterocyclic piperidine derivatives as

inhibitor of cholesterol ester transfer protein

INVENTOR(S):

Bell, Michael Gregory; Cao, Guoqing; Escribano, Ana Maria; Fernandez, Maria Carmen; Lander, Peter Ambrose;

Mantlo, Nathan Bryan; Martin de la Nava, Eva

Maria; Mateo Herranz, Ana Isabel; Mayhugh, Daniel Ray;

Wang, Xiaodong

PATENT ASSIGNEE(S):

Eli Lilly and Company, USA

SOURCE:

PCT Int. Appl., 134 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND						IND DATE		APPLICATION NO.						DATE				
WO	2005	0978	06		A1	_	2005	1020	1						2	0050	317	
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							ID,											
							LV,											
							PL,											
		SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,																
		AZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
							GR,											
		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	ĠQ,	GW,	ML,	
		MR,	NE,	SN,	TD,	TG												
AU	2005	2309	15		A1		2005	1020		AU 2	005-	2309	15		2	0050	317	
CA	2557	010			A1		2005	1020		CA 2	005-	2557	010		2	0050	317	
EP	1735	320			A1		2006	1227		EP 2	005-	7259	68		2	0050	317	
	R:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	
		IS,	IT,	LI,	LT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	AL,	BA,	
		HR,	LV,	MK,	YU													
NO	2006	0047	63		Α		2006	1122		NO 2	006-	4763			2	0061	020	
PRIORIT	Y APE	LN.	INFO	.:						US 2	004-	5571	34P		P 2	0040	326	
										US 2	004-	6211	62P		P 2	0041	022	
										WO 2	005-	US93	01		W 2	0050	317	
OTHER SO	OURCE	:(S):			MAR	PAT	143:	4058	09									

AB Title compds. I [n = 0-3; q = 0-2; W, X, Y and Z independently = CH, C, N, etc.; A = 5-6 membered ring wherein one of W, X, Y or Z may be absent with

^{*} STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

provisions; K = bond, CO or S(O)p; p = 0-2; R1 when n = 0 and K is CO or S(O)p= -0-alkyl, -0-aryl, -0-alkenyl, etc. and R1 when n = 1-3 and K is a bond = OH, alkyl, alkenyl, etc.; R2 = H, halo, alkynyl, etc.; R3 = H, aryl, cycloalkyl, etc.; R4 = NR7R8; R5 = H, OH, halo, etc.; R6 = H, alkyl, alkenyl, etc.; R7 = alkyl, alkenyl, cycloalkyl, etc.; R8 = aryl, alkylaryl, alkenylaryl, etc.] and their pharmaceutically acceptable salts, are prepared and disclosed as inhibitors of cholesterol ester transfer protein (CEPT). Thus, e.q., II was prepared by cyclization of 2-(thiophen-3-ylaminomethylene)malonic acid di-Et ester followed by acylation/alkylation sequence using iso-Pr chloroformate and Et magnesium bromide and subsequent decarboxylation/amination/acetylation sequence using 3,5bis(trifluoromethyl)benzylamine and acetic anhydride. The ability of I to inhibit the transfer of radiolabeled cholesterol esters between HDL and LDL was evaluated using an in vitro scintillation proximity assay and it was revealed that compds. of the invention possessed an activity of below 100 $\mu M.$ I should prove useful in the treatment of dyslipidemia. Pharmaceutical compns. comprising I are disclosed.

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 5 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN 2005:1130645 HCAPLUS Full-text ACCESSION NUMBER:

6

DOCUMENT NUMBER:

143:386939

TITLE:

Preparation of heterocyclic azepine derivatives as inhibitor of cholesterol ester transfer protein Bell, Michael Gregory; Cao, Guoqing; Escribano, Ana

INVENTOR(S): Maria; Fernandez, Maria Carmen; Mantlo, Nathan Bryan; Martin de la Nava, Eva Maria; Mateo Herranz, Ana Isabel; Mayhugh, Daniel Ray; Wang,

Xiaodong

PATENT ASSIGNEE(S):

Eli Lilly and Company, USA

SOURCE:

PCT Int. Appl., 88 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

WO 2005097805 A1 20051020 WO 2005-US9294 20050317 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW	PATE	PATENT NO.				KIND DATE			APPLICATION NO.					DATE					
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM,	WO 2	20050	09780)5		A1								94		20	050	317	
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM,		W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM,			CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM,			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NA,	NI,	
SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW	• .		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	
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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,		RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	ΤZ,	UG,	ZM,	ZW,	AM,	
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,			ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
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RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,			RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	
MR, NE, SN, TD, TG			MR,	NE,	SN,	TD,	TG												
EP 1732933 A1 20061220 EP 2005-732643 20050317	EP 1	732	933			A1		2006	1220		EP 2	005-	7326	43		21	0050	317	
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IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR			IS,	IT,	LI,	LT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR			
PRIORITY APPLN. INFO.: US 2004-557134P P 20040326	PRIORITY	APP	LN.	INFO	. :						US 2	004-	5571	34P	:	P 2	0040	326	
US 2004-621162P P 20041022																			
WO 2005-US9294 W 20050317										WO 2005-US9294				W 20050317					

OTHER SOURCE(S):

MARPAT 143:386939

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Title compds. I [Q = (CH2)j; n = 0-3; m = 0-6; j = 1-2; q = 0-2; W, X, Y and ZAB independently = CH, C, N, etc.; A = 5-6 membered ring wherein one of W, X, Y or Z may be absent with provisions; K = bond, CO or S(O)p; p = 0-2; R1 = OH, alkyl, alkenyl, etc.; R2 = H, halo, alkynyl, etc.; R3 = H, aryl, cycloalkyl, etc.; R4 = NR7R8; R5 = H, OH, halo, etc.; R6 = H, alkyl, alkenyl, etc.; R7 = alkyl, alkenyl, cycloalkyl, etc.; R8 = aryl, alkylaryl, alkenylaryl, etc.] and their pharmaceutically acceptable salts, are prepared and disclosed as inhibitors of cholesterol ester transfer protein (CEPT). Thus, e.g., II was prepared by cyclization of 4-[isopropoxycarbonyl-(3-methoxycarbonyl-propyl)amino]-thiophene-3- carboxylic acid Me ester (preparation given) using potassium tert-butoxide followed by decarboxylation/amination sequence using 3,5- bis(trifluoromethyl)benzylamine and subsequent acylation using acetic anhydride. The ability of I to inhibit the transfer of radiolabeled cholesterol esters between HDL and LDL was evaluated using an in vitro scintillation proximity assay and it was revealed that compds. of the invention possessed an activity of below 100 µM. I should prove useful in the treatment of dyslipidemia. Pharmaceutical compns. comprising I are disclosed. REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 6 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2005:638853 HCAPLUS Full-text

DOCUMENT NUMBER:

143:153366

TITLE:

Preparation of bicyclic derivatives as PPAR modulators

Conner, Scott Eugene; Mantlo, Nathan Bryan; INVENTOR(S):

Zhu, Guoxin; Herr, Robert Jason

PATENT ASSIGNEE(S):

Eli Lilly and Company, USA

SOURCE:

PCT Int. Appl., 193 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PAT	ENT 1	NO.			KINI) 1	DATE		1	APPL:	ICAT:	ION 1	NO.		D2	ATE	:
	WO	2005	0661:	36		A1		2005	0721	1	WO 2	004-	us39	773		2	00412	216
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			CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
						HR,												
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
			NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
			ТJ,	TM,	TN,	TR,	TT,	ΤZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
		RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	ΤZ,	UG,	ZM,	ZW,	AM,
						ΚZ,												
			EE,	ES,	FI,	FR,	GB,	GR,	ΗU,	ΙE,	IS,	IT,	LT,	LU,	MC,	NL,	PL,	PT,
			RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,
			•			TD,												
	ΕP	1706	386			A1		2006	1004		EP 2	004-	8123	19.		2	0041	216
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			IE,	SI,	LT,	FI,	RO,	CY,	TR,	BG,	CZ,	ΕĒ,	HU,	ΡĻ,	SK,	IS		
PRIC	RITY	APP										003-					0031	222
											US 2	004-	5866	77P		P 2	0040	709
											WO 2	004-	US39	773	1	₩ 2	0041	216

$$E-Y \xrightarrow{R8} \begin{array}{c} R32 \\ R32 \\ R10 \\ R2 \\ R11 \\ I$$

$$F_3C - N^N - O - CO_2H$$
 II

The title compds. I [R1 = H, alkyl, arylalkyl, etc.; R2 = alkyl, heteroalkyl; X = a single bond, O, S, SO2, N; U = an aliphatic linker wherein one carbon atom of the aliphatic linker is optionally replaced with O, NH or S, and wherein such aliphatic linker is optionally substituted with from 1-4 substituents; Y = C, O, S, NH and a single bond; E = CR3R4A or A (wherein A = carboxy, tetrazole, alkylnitrile, etc.; R3 = H, alkyl, alkoxy; R4 = H, alkyl, aryloxy, etc.); R8 = H, alkyl, alkenyl, halo; R9 = H, alkyl, halo, etc.; R10, R11 = H, OH, CN, etc.; R32 = H, halo, alkyl, etc.; AL = fused carbocyclic, fused pyridinyl, fused pyrimidinyl, fused Ph], useful for modulating a peroxisome proliferator activated receptor, were prepared and formulated. E.g., a multi-step synthesis of II, starting from 2-bromo-m-xylene, was given. The binding and cotransfection efficacy values for compds. I which are especially useful for modulating a PPAR receptor, are ≤ 100 nM and ≥ 50%, resp.

REFERENCE COUNT:

5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 7 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:371225 HCAPLUS Full-text

DOCUMENT NUMBER:

142:430156

TITLE:

Preparation of benzazepines as inhibitors of

cholesterol ester transfer protein for treating

dyslipidemia

INVENTOR(S):

Cao, Guoqing; Escribano, Ana Maria; Fernandez, Maria Carmen; Fields, Todd; Gernert, Douglas Linn; Cioffi, Christopher Lawrence; Herr, Robert Jason; Mantlo, Nathan Bryan; Martin De La Nava, Eva Maria; MateO Herranz, Ana Isabel; Mayhugh, Daniel Ray; Wang,

Xiaodong

PATENT ASSIGNEE(S):

Eli Lilly and Company, USA

PCT Int. Appl., 188 pp.

DOCUMENT TYPE:

CODEN: PIXXD2

LANGUAGE:

SOURCE:

Patent English

1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005037796	A1	20050428	WO 2004-US30907	20041007

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W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
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             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
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         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
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             EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG
                                 20050428
                                             AU 2004-282101
     AU 2004282101
                          A1
                                                                    20041007
                                 20050428
                                             CA 2004-2537942
                                                                    20041007
     CA 2537942
                          A1
                                             EP 2004-793889
                                                                    20041007
     EP 1670768
                          Α1
                                20060621
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR
                                 20061031
                                             BR 2004-14186
                                                                    20041007
                          Α
     BR 2004014186
                                             CN 2004-80029540
                                                                    20041007
                                 20061115 -
     CN 1863778
                          Α
                                 20060508
                                             NO 2006-2074
                                                                     20060508
     NO 2006002074
                                             US 2003-509736P
                                                                 Ρ
                                                                    20031008
PRIORITY APPLN. INFO.:
                                             WO 2004-US30907
                                                                 W
                                                                    20041007
OTHER SOURCE(S):
                         MARPAT 142:430156
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GΙ

Title compds. I [n, m, q = 0-3; p = 1-2; R1 = OH, alkyl, aryl, etc.; R2 = H, OH, halo, etc.; R3 = H; R4 = (un)substituted amino; R5 = H, OH, halo, etc.; R6 = allyl alc., alkoxy, etc.] are prepared For instance, 5-[acetyl(3,5-bis(trifluoromethyl)benzyl)amino]-2,3,4,5- tetrahydrobenzo[b]azepine-1-carboxylic acid iso-Pr ester (II) is prepared in 8 steps from 2-aminobenzoic acid Me ester, Et 4-bromobutyrate and 3,5-bis(trifluoromethyl)benzylamine. II has an IC50 of 293 nM for cholesterol ester transfer protein (CETP). I are useful for treating atherosclerosis and its sequelae.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 8 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:902349 HCAPLUS Full-text

DOCUMENT NUMBER: 141:379802

TITLE: Preparation of indole derivatives as PPAR

modulators for treatment of diabetes mellitus,

syndrome X, and related disorders

INVENTOR(S): Conner, Scott Eugene; Knobelsdorg, James Allen;

Mantlo, Nathan Bryan; Mayhugh, Daniel Ray;

Wang, Xiaodong; Zhu, Guoxin;

Schkeryantz, Jeffrey Michael; Michellys, Pierre-Yves Eli Lilly and Company, USA; Ligand Pharmaceuticals,

PATENT ASSIGNEE(S):

Inc.

SOURCE:

PCT Int. Appl., 262 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

GΙ

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

P.	PATENT NO.					D	DATE			APPL	ICAT	ION 1	NO.		D	ATE		
W(2004	10921	 31		A1	-	 2004	1028	1	WO 2	003-	US41	 698		2	0031	231	
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	ΚZ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	
		NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	
		TM,	TN,	TR,	TT,	ΤZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	
		BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	
		ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	
			•	•	•	•	CI,		•						-	-		TG
	U 2003																	
El	P 1581											•						
	R:	ΑT,															PT,	
							RO,											
US	S 2006	51669	83.		A1		2006	0727										
PRIORI	TY API	PLN.	INFO	.:								4385						
										WO 2	003-	US41	698	1	₩ 2	0031	231	
OTHER S	SOURCE	E(S):			MAR	PAT	141:	3798	02									

$$E = Y$$
 $X = U = T^1 = R^2 = R^{33}$
 Z^{12}
 R^9
 I

Title compds. I [wherein T1 = (un)substituted oxazol-4-yl, oxazol-5-yl, thiazol-4-yl, thiazol-5-yl, phenylene; R2 = hetero/alkyl; X = a bond, O, S, SO2, N; U = (un)substituted aliphatic linker wherein 1 C atom of the linker may be replaced with O, NH, or S; Y = C, O, S, NH, and a single bond; E = CR3R4A or A; A = alkylcarboxyl, alkylnitrile, alkylcarboxamide, (un)substituted alkylsulfonamide, alkylacylsulfonamide, alkyltetrazole; R3 =

H, alkyl, alkoxy; R4 = H, aryloxy, (un)substituted alkyl, alkoxy, cycloalkyl, arylalkyl; R3CR4 = (un)substituted cycloalkyl; Z12 = -Z13-alkyl-Z14; Z13 = a single bond, CO, CO2, CONH and derivs., SO2; Z14 = (un)substituted hetero/aryl; R9 = H, alkyl, alkylenyl, halo, allyl, OH and derivs., (un) substituted arylalkyl, heteroaryl; R33 = alkyl, alkoxy, Ph, etc.; R = alkyl, carboxyalkyl, alkylsulfonaminocarbonylmethyl, etc; or stereoisomers, pharmaceutically acceptable salts, solvates, and hydrates thereof] were prepared as peroxisome proliferator activated receptor (PPAR) modulators. For example, reacting (5-Hydroxyindol-1- yl)acetic acid Et ester (preparation given) with 4-Chloromethyl-5-methyl-2-(4- trifluoromethylphenyl)oxazole, followed by saponification with NaOH gave II in near quant. yield. The binding and cotransfection efficacy for the compds. of the invention which are especially useful for modulating a PPAR receptor, are < 100 nM and > 50%, resp. I and their pharmaceutical compns. are expected to be effective in treating and preventing Syndrome X, Type II diabetes, hyperglycemia, hyperlipidemia, obesity, coagulopathy, hypertension, atherosclerosis, and other disorders related to Syndrome X and cardiovascular diseases.

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

HCAPLUS COPYRIGHT 2007 ACS on STN L23 ANSWER 9 OF 19

ACCESSION NUMBER:

2004:718289 HCAPLUS Full-text

DOCUMENT NUMBER:

141:243332

TITLE:

Preparation of sulfonamide derivatives, in particular

N.N-benzo[b]thiophene sulfonamides, as PPAR

modulators, especially PPAR agonists

INVENTOR(S):

Conner, Scott Eugene; Gossett, Lynn Stacy; Green, Jonathan Edward; Jones, Winton Dennis, Jr.; Mantlo, Nathan Bryan; Matthews, Donald Paul;

Mayhugh, Daniel Ray; Smith, Daryl Lynn; Vance, Jennifer Ann; Wang, Xiaodong; Warshawsky,

Alan M.; Winneroski, Leonard Larry, Jr.; Xu, Yanping;

Zhu, Guoxin

PATENT ASSIGNEE(S):

Eli Lilly and Company, USA

PCT Int. Appl., 435 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	CENT				KIN	D	DATE				ICAT:				DA	ATE	
WO	2004	0736	06												20	0402	210
WO	2004																
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
							DE,										
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NΑ,	NI
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	ΤZ,	UG,	ZM,	ZW,	AT,	BE,
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		MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,
		GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG								
ΑU	2004	2128	87		A1		2004	0902		AU 2	004-	2128	87		2	0040	210
CA	2512	883			A1		2004	0902	1	CA 2	004-	2512	883		2	0040	210
EΡ	1597	248			A2		2005	1123		EP 2	004-	7098	06		2	0040	210
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
							RO,				TR,	BG,	CZ,	EE,	ΗU,	SK	
BR	2004	0071	80	·	A		2006	0207		BR 2	004-	7180			2	0040	210
CN	1751	037			Α		2006	0322		CN 2	004-	8000	4250		2	0040	210

JP 2006520755 T 20060914 JP 2006-502992 20040210 US 2006217433 A1 20060928 US 2005-542579 20050715 PRIORITY APPLN. INFO.: US 2003-448307P P 20030214 WO 2004-US2015 W 20040210

OTHER SOURCE(S): M

MARPAT 141:243332

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Title compds. I [wherein A = II, III; D = (CH2)o; B = R1b-[C]q-R1a; E = O, S, AB NH and derivs.; W = -Y - (CR4R5) - Q, H, cyclo/halo/alkyl, acyl; Q = CO2H and derivs.; CO2NH2, sulfonamide, etc.; X = a bond, C, O, S, S[O]p; Z = (un) substituted aliphatic group, aryl, 5- to 10-membered heteroaryl, bi(hetero)aryl, heterocyclyl; o = 0-4; q = 0-3; m = 1-4; n = 1-2; R1, R2 = independently H, wherein when Z = Ph or naphthyl and R2 = H, R1 is not H, halo, (un) substituted alk(en/yn) yl, aryl, or R1 and R2 form a 5- to 8-membered heterocycle; R1a, R1b = independently H, alkyl, or R1 and R1a, R1and R1b, R2 and R1b, or R1a and R1b form a 3- to 6-membered heterocyclyl or carbocyclyl, where at least one of R1a and or R1b is not H; R2a = H, halo, (un)substituted alkyl and wherein R2 and R2a together being a 3- to 8-membered ringR3 = H, halo, CN, (un) substituted cyclo/alkyl, (alkyl) heterocyclyl, etc.; R4, R5 = independently H, halo, alkyl, alkoxy, aryloxy, NH2 and derivs., SH and derivs., or R4CR5 = 3- to 8-membered ring; and pharmaceutically acceptable salts, solvates, hydrates or stereoisomers thereof] were prepared as PPAR modulators, especially PPAR agonists. A multistep synthesis is given for sulfonamide IV. I displayed IC50 and EC50 in the range of about 1 nM to about 5 μM for binding to PPAR alpha, gamma, and delta receptors. I are useful in treating or preventing disorders mediated by a peroxisome proliferator activated receptor (PPAR) such as syndrome X, type II diabetes, hyperglycemia, hyperlipidemia, obesity, coaqulopathy, hypertension, arteriosclerosis, and other disorders related to syndrome X and cardiovascular diseases.

L23 ANSWER 10 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:658169 HCAPLUS Full-text

TITLE: Design and synthesis of $3-(2-methyl-4-\{2-[3-methyl-5-methyl-4-\{2-[3-methyl-5-methyl-4-\{2-[3-methyl-5-methyl-4-\{2-[3-methyl-5-methyl-4-\{2-[3-methyl-5-methyl-4-\{2-[3-methyl-4-\{2-[3-methyl-5-methyl-4-\{2-[3-methyl-4-\{2-[3-methyl-4-\{2-[3-methyl-4-[3-meth$

(4-trifluoromethyl-phenyl)-thiophen-2-yl]-propoxy)-

phenyl)-propionic acid as a potent selective

PPAR delta agonist

AUTHOR(S): Wang, Xiaodong; Zhu, Guoxin; Barr,

Robert; Montrose-Rafizadeh, Chahrzad; Osborne, John J.; Yumibe, Nathan; Jett, Donald R.; Zink, Richard W.;

Mantlo, Nathan B.

CORPORATE SOURCE: Lilly Research Laboratories, Eli Lilly and Company,

Indianapolis, IN, 46032, USA

SOURCE: Abstracts of Papers, 228th ACS National Meeting,

Philadelphia, PA, United States, August 22-26, 2004

(2004), MEDI-306. American Chemical Society:

Washington, D. C. CODEN: 69FTZ8

Conference; Meeting Abstract

LANGUAGE: English

DOCUMENT TYPE:

AB Pre-clin. studies in obese rhesus monkeys and ob/ob mouse indicated that a selective PPAR delta agonist changes the serum lipoprotein composition by increasing high d. lipoprotein cholesterol (HDLc) while decreasing low d. lipoprotein (LDLc) and fasting triglycerides by regulating the reverse cholesterol transporter ATP-binding cassette A1 (ABCA1) and cholesterol efflux

from many tissues. These results suggested that a selective PPAR delta agonist could provide a new treatment for dyslipidemia and arteriosclerosis associated with metabolic syndrome X. In search of potent and selective PPAR delta agonists, a new class of compds. featuring 2,3,5-tri-substituted thiophenes was designed and synthesized. This presentation discloses the chemical and SAR study around 3-(2-methyl-4-{2-[3-methyl-5-(4-trifluoromethylphenyl)-thiophen-2-yl]-propoxy}-phenyl)-propionic acid (1).

L23 ANSWER 11 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN

2004:658044 HCAPLUS Full-text ACCESSION NUMBER:

Design and synthesis of novel, potent, and selective TITLE:

PPAR delta agonists

Conner, Scott E.; Zhu, Guoxin; AUTHOR(S):

Montrose-Rafizadeh, Chahrzad; Barr, Robert J.; Jett,

Don; Zink, Richard W.; Yumibe, Nathan; Mantlo,

Nathan B.

Lilly Research Laboratories, Eli Lilly and Company, CORPORATE SOURCE:

Indianapolis, IN, 46285, USA

Abstracts of Papers, 228th ACS National Meeting, SOURCE:

Philadelphia, PA, United States, August 22-26, 2004

(2004), MEDI-180. American Chemical Society:

Washington, D. C. CODEN: 69FTZ8

Conference; Meeting Abstract DOCUMENT TYPE:

LANGUAGE: English

The peroxisome proliferator-activated receptors (PPARs) play an essential role AB in the processes of lipid homeostasis. Recent studies have found that the PPAR delta isoform is a regulator of serum lipids, and selective agonists have been shown to dramatically lower serum triglyceride (TG) and low-d. lipoprotein (LDL) levels, while increasing high-d. lipoprotein (HDL) levels. There are currently no drugs in clin. use that selectively activate this receptor, although selective PPAR delta agonists have been shown to affect marked changes in the lipid profile in an obese rhesus monkey model. Dyslipidemia is a major risk factor in the development of atherosclerosis, and may be a suitable indication for this plenipotent modulator of lipid metabolism In this presentation, the design and synthesis of potent and selective PPAR delta agonists featuring 2,4,5-substituted thiazoles will be discussed. This presentation demonstrates the chemical and SAR for the representative compound below.

L23 ANSWER 12 OF 19 HCAPLUS COPYRIGHT 2007 ACS: on STN

2004:606448 HCAPLUS Full-text ACCESSION NUMBER:

141:157111 DOCUMENT NUMBER:

Preparation of pyrazoles and analogs as PPAR TITLE:

modulators for treatment of metabolic disorders,

diabetes mellitus, atherosclerosis, and cardiovascular

disorders

Conner, Scott Eugene; Ma, Tianwei; Mantlo, Nathan INVENTOR(S):

Bryan; Mayhugh, Daniel Ray; Schkeryantz, Jeffrey

Michael; Warshawsky, Alan M.; Zhu, Guoxin

PATENT ASSIGNEE(S):

Eli Lilly and Company, USA

PCT Int. Appl., 214 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

	PAT	TENT I	NO.			KINI)	DATE		1	APPL	[CAT]	ION 1	10.		DA	ATE		
•		2004				A1 A8		2004(2005(7	NO 20	003-	US39:	119		20	0031	231	
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,	
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,	
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	·IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	
			ΝZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	
			TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
		RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	ΤZ,	UG,	ZM,	ZW,	AM,	ΑZ,	
			BY,	KG,	ΚZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	
			ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	
			TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG
	ΑU	2003	29640	04		A1		2004	0810	i	AU 20	003-	29640)4		20	0031	231	
	EΡ	1585	733			A1		2005	1019	1	EP 20	003-	8151	95		20	0031	231	
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
			ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	BG,	CZ,	EE,	HU,	SK			
	US	2006	2411	57		A1		2006	1026	1	JS 20	005-	5403	41		2	0050	621	
PRIOR	RIT	APP	LN.	INFO	.:					1	US 20	003-	4385	63P]	P 20	0030	106	
										1	WO 20	003-1	US39:	119	I	W 2	0031	231	

OTHER SOURCE(S):

MARPAT 141:157111

GI

Title pyrazoles, imidazoles, and (is)oxazoles I [wherein R1 = H, AΒ (un) substituted alkyl, alkenyl, (hetero) aryl(alkyl), arylheteroalkyl, cycloalkylaryl(alkyl); R2 = absent, (hetero)alkyl; R8 = H, alkyl, alkylenyl, halo; R9 = H, (un) substituted alkyl, alkylenyl, halo, aryl(alkyl), heteroaryl, allyl, alkoxy, alkylthio, etc.; R10, R11 = independently H, OH, CN, NO2, halo, oxo, (un) substituted (halo) alkyl, alkoxy, cycloalkyl, (hetero) aryl(alkyl), cycloalkylaryl(alkyl), aryloxy, acyl, carboxy, amino, sulfamoyl, etc.; R32 = bond, H, halo, (halo)alkyl, alkyloxo; E = (un)substituted carboxy(methyl), tetrazolyl(methyl), nitriloalkyl, carboxamido(methyl), sulfonamido(methyl); U = (un)substituted aliphatic linker wherein one C of the linker is optionally replaced with O, NH, or S; X = bond, O, S, SO2, NH; Y = bond, CH2, NH; Z1, Z2 = independently N, O, C, whit the proviso that at least one of Z1 and Z2 = N; 23 = N, O, C; or stereoisomers, pharmaceutically acceptable salts, solvates, and hydrates thereof] were prepared as peroxisome proliferator activated receptor (PPAR) modulators (no data). For example, chlorination of [3-methyl-1-(4-trifluoromethylphenyl)-1H-pyrazol-4-yl]methanol with MeSO2Cl and TEA in CH2Cl2, followed by coupling with (4-hydroxy-2- methylphenoxy)acetic acid Me ester using Cs2CO3 in acetonitrile and saponification with NaOH in MeOH

provided II. I and their pharmaceutical compns. are expected to be effective in treating and preventing metabolic disorders, diabetes mellitus, atherosclerosis, and cardiovascular disorders (no data).

L23 ANSWER 13 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN 2004:606447 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER:

141:157110

TITLE:

Preparation of a pyrazole as a PPAR modulator for treatment of diabetes mellitus, inflammatory diseases,

and other disorders

INVENTOR(S):

Conner, Scott Eugene; Mantlo, Nathan Bryan;

Mayhugh, Daniel Ray; Zhu, Guoxin

PATENT ASSIGNEE(S):

Eli Lilly and Company, USA

SOURCE:

PCT Int. Appl., 30 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.				KINI)	DATE		1			ION I			D <i>I</i>	ATE			
,	 WO	2004	0631	65		A1	_	2004	0729	7						20	00312	231	
		W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,	
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜŻ,	NI,	NO,	
			NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	
			TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
		RW:						MW,										ΑZ,	
			BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	
			ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	
			TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG
		2003																	
	ΕP	1583																	
		R:						ES,										PT,	
			ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK		
	US	2007	0432	20.		A1		2007	0222										
PRIOR	IT	APP	LN.	INFO	.:			•			US 2	003-	4385	63P		P 2	0030	106	
										1	WO 2	003-	US39	117	1	W 2	0031	231	

$$_{\mathrm{F}_{3}\mathrm{C}}$$
 $^{\mathrm{N}}$ $^{\mathrm{Me}}$ $^{\mathrm{o}}$ $^{\mathrm{OH}}$

The present invention is directed to a compound, [2-methyl-4-[[[3-methyl-1-AΒ (4-trifluoromethylphenyl)-1H-pyrazol-4-yl]methyl]sulfanyl]phenoxy]acetic acid (I), and pharmaceutically acceptable salts, solvates, and hydrates thereof for use as a peroxisome proliferator activated receptor (PPAR) modulator. Examples include three synthetic methods for the preparation of I, as well as protocols and some data for biol. assays. For instance, I was prepared by alkylation of (4-mercapto-2-methylphenoxy)acetic acid Et ester with 4chloromethyl-3-methyl-1-(4-trifluoromethylphenyl)-1H-pyrazole using Cs2CO3 in acetonitrile, followed by saponification with NaOH in MeOH. In binding studies, I activated huPPARO, PPARO, and PPARy with EC50 values of 20 nM, 1800 nM, and 2600 nM, resp. Thus, I and its pharmaceutical compns. are expected to be effective in treating and preventing diabetes mellitus, cardiovascular disorders, inflammatory conditions, and other disorders (no data).

L23 ANSWER 14 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:606439 HCAPLUS Full-text

DOCUMENT NUMBER:

141:157107

TITLE:

Preparation of fused heterocyclic derivatives as PPAR

modulators for treatment of diabetes mellitus,

syndrome X, and related disorders

INVENTOR(S):

Conner, Scott Eugene; Mantlo, Nathan Bryan;

Zhu, Guoxin

CODEN: PIXXD2

PATENT ASSIGNEE(S):

Eli Lilly and Company, USA

SOURCE:

PCT Int. Appl., 294 pp.

Patent

LANGUAGE:

DOCUMENT TYPE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	PATENT NO WO 2004063155					D -	DATÉ					ION			Dž	ATE		
WO	2004	10631	55				2004	0729	,						20	0031	231	
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,	
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							ID,											
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	
		ΝZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	
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							ТJ,											
							HU,											
							CI,											
CA	2509	9202			A1		2004	0729		CA 2	003-	2509	202		21	0031	231	•
ΑU	2003	32964																
EP	1585	5726			A1		2005	1019		EP 2	003-	8151	96		2	0031	231	
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙT,	LI,	LU,	NL,	SE,	MC,	PT,	
		·IE,	SI,	LT,	LV,	FΙ,	RO,	MK,	CY,	AL,	BG,	CZ,	EE,	HU,	SK			
JP	2006	65162	54		T		2006	0629		JP 2	004-	5665	26		2	0031	231	
US	2006	62057	44		A1		2006	0914										
RIORIT	Y API	PLN.	INFO	.:						US 2	003-	4385	40P		P 2	0030	106	
										US 2	003-	4385	41P		P 2	0030	106	
										WO 2	003-	US39	120	,	W 2	0031	231	
THER S	OURCE	E(S):			MAR	PAT	141:	1571	07									

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$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

Title compds. I [wherein R1 = H, (un) substituted alkyl, alkenyl, AΒ (hetero)aryl(alkyl), arylheteroalkyl, cycloalkylaryl(alkyl); R2 = absent, (hetero) alkyl; R8 = H, alkyl, alkylenyl, halo; R9 = H, (un) substituted alkyl, alkylenyl, halo, aryl(alkyl), heteroaryl, allyl, alkoxy, alkylthio, etc.; R10, R11 = independently H, OH, CN, NO2, halo, oxo, (un) substituted (halo) alkyl, alkoxy, cycloalkyl, (hetero)aryl(alkyl), cycloalkylaryl(alkyl), aryloxy, acyl, carboxy, amino, sulfamoyl, etc.; R32 = bond, H, halo, (halo)alkyl, alkyloxo; AL = fused carbocyclic, pyridinyl, pyrimidinyl, Ph; B = S, O, CH2, NH; E = (un) substituted carboxy (methyl), tetrazolyl (methyl), nitriloalkyl, carboxamido(methyl), sulfonamido(methyl); U = (un)substituted aliphatic linker wherein one C of the linker is optionally replaced with O, NH, or S; X = bond, O, S, SO2, NH; Y = bond, CH2, NH; Z = N, CH, with the proviso that when B = CH2, then Z = N; or stereoisomers, pharmaceutically acceptable salts, solvates, and hydrates thereof] were prepared as peroxisome proliferator activated receptor (PPAR) modulators (no data). For example, (4-mercapto-2methylphenoxy)acetic acid Me ester was coupled with toluene-4-sulfonic acid 2-(4-trifluoromethylphenyl)-5,6-dihydro-4H-cyclopentathiazol-4- ylmethyl ester in the presence of Cs2CO3 in anhydrous acetonitrile to give the [[(cyclopentathiazolylmethyl)sulfanyl]phenoxy]acetate (45%), which was saponified with LiOH in THF to afford II (quant.). I and their pharmaceutical compns. are expected to be effective in treating and preventing Syndrome X, Type II diabetes, cardiovascular disorders, inflammatory conditions, and other disorders (no data).

L23 ANSWER 15 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2003:829477 HCAPLUS Full-text

DOCUMENT NUMBER:

139:381431

TITLE:

Design and Synthesis of a Potent and Selective Triazolone-Based Peroxisome Proliferator-Activated

Receptor α Agonist

AUTHOR(S):

Xu, Yanping; Mayhugh, Daniel; Saeed, Ashraf;

Wang, Xiaodong; Thompson, Richard C.;

Dominianni, Samuel J.; Kauffman, Raymond F.; Singh, Jaipal; Bean, James S.; Bensch, William R.; Barr,

Robert J.; Osborne, John; Montrose-Rafizadeh,

Chahrzad; Zink, Richard W.; Yumibe, Nathan P.; Huang, Naijia; Luffer-Atlas, Debra; Rungta, Deepa; Maise,

Dale E.; Mantlo, Nathan B.

CORPORATE SOURCE:

Lilly Research Laboratories, Lilly Corporate Center,

Eli Lilly Company, Indianapolis, IN, 46285, USA

SOURCE:

Journal of Medicinal Chemistry (2003), 46(24),

5121-5124

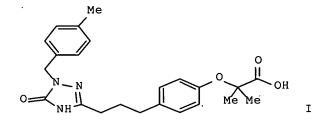
CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 139:381431

GI



A new series of hPPAR α agonists containing a 2,4-dihydro-3H-1,2,4- triazol-3-AB one (triazolone) core is described leading to the discovery of I (LY518674), a highly potent and selective PPAR α agonist.

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 16 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN 2003:696736 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 139:230769

TITLE: Preparation of (arylalkyl)thiazoles and oxazoles as

peroxisome proliferator activated receptor modulators for treating diabetes mellitus and atherosclerosis

Conner, Scott Eugene; Mantlo, Nathan Bryan;

INVENTOR(S):

Zhu, Guoxin

Eli Lilly and Company, USA PATENT ASSIGNEE(S):

PCT Int. Appl., 153 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	TENT	NO.			KIN	D	DATE			APPL	ICAT:	I NOI	NO.		D	ATE	
						-						÷-			_		
WO	2003	0721	02		A1		2003	0904	1	WO 2	003-1	US26	80		2	0030	213
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,
		LŞ,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
		PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,
		UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	•					
	RW:	GH,	GM,	ΚE,	LS,	MW,	ΜZ,	SD,	ŞL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	ΚZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
		FI,	FR,	GB,	GR,	HU,	ΙE,	ΙT,	LU,	MC,	NL,	PT,	SE,	SI,	SK,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG	
ΑU	2003	2149	32		A1		2003	0909		AU 2	003-	2149	32		2	0030	213
ΕP	U 2003214932 P 1480642				A1		2004	1201		EP 2	003-	7107	80		2	0030	213
	R:	ΑT,	ΒE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK 20050922 JP 2003-570848 20030213 JP 2005528346 Т US 2004-505103 20040817 US 2006084663 20060420 A1 20020225 US 2002-359807P PRIORITY APPLN. INFO .: WO 2003-US2680 W 20030213

OTHER SOURCE(S):

MARPAT 139:230769

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Title compds. I [wherein R3 = H or alkoxy; R4 = H or alkyl; R5 = alkyl, AB alkenyl, or (un) substituted aryl(oxy) alkyl or arylthioalkyl; R6 = CF3, OCF3, (hydroxy)alkyl, alkylcarbamoyl, carboxyalkoxy, or (un)substituted aryloxy, arylthio, pyridinyl, pyrimidinyl, pyrazinyl, or arylalkyl; R7 and R8 = independently H, CF3, or alkyl; R9 and R10 = independently H, alkyl, alkenyl, or alkoxy; T1 = C or N; Q = bond, O, O(CH2)q, or C; q = 1-2; W = O, S, SO2, NHSO2, etc.; X = CmH2m; m = 0-2; Y and Z = independently O, N, or S wherein atleast 1 of Y and Z = O or S; A = CO2H, alkylnitrile, CONH2, or (CH2)nCO2R19; n = 0-3; R19 = H or (un)substituted alkyl or arylmethyl; and pharmaceutically acceptable salts thereof] were prepared as peroxisome proliferator activated receptor (PPAR) agonists (no data). For example, (4-mercapto-2methylphenoxy) acetic acid Et ester was coupled with 5-chloromethyl-4phenethyl-2-(4-trifluoromethylphenyl)thiazole in the presence of Cs2CO3 in MeCN to give the (phenylthiomethyl)thiazole (83.5%), which was saponified with LiOH in THF to provide II. I and their pharmaceutical compns. are useful for the prevention and or treatment of diabetes mellitus and atherosclerosis (no data).

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REFERENCE COUNT:

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 17 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:696734 HCAPLUS Full-text

7

DOCUMENT NUMBER:

139:230768

TITLE:

Preparation of (arylalkyl)thiazoles and oxazoles as peroxisome proliferator activated receptor modulators

for treating diabetes mellitus, syndrome X, and

cardiovascular disease

INVENTOR(S):

Conner, Scott Eugene; Knobelsdorf, James Allen; Mantlo, Nathan Bryan; Schkeryantz, Jeffrey Michael; Shen, Quanrong; Warshawsky, Alan M.;

Zhu, Guoxin

PATENT ASSIGNEE(S):

SOURCE:

Eli Lilly and Company, USA PCT Int. Appl., 223 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	PATENT NO.					D	DATE			APPL	ICAT	ION I	NO.		D	ATE	
WO	2003	0721	00		A1		2003	0904		WO 2	003-	US26	79		2	0030	213
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KΡ,	KR,	ΚZ,	LC,	LK,	LR,
							MD,										
		PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,
							VN,										
	RW:						MZ,										
							TM,										
							IE,										BF,
							GA,										
	2003																
EP	1480																
	R:						ES,										PT,
							RO,										
	2005																
US	2005	1074	49		A1		2005	0519		US 2	004-	5050	89		2	0040	817
US	7153	878			В2		2006	1226									
PRIORIT	Y APP	LN.	INFO	.:							002-						
•										WO 2	003-	US26	79		W 2	0030	213
OTHER S		(S):			MAR	PAT	139:	2307	68								

AB Title compds. I [wherein R3, R4, R30, and R40= independently H, alkyl, halo, or alkoxy; R5 = (un)substituted alkyl, alkenyl, aryl(oxy)alkyl, or arylthioalkyl; or when R5 = alkyl, R5 may be combined with W to form a

heterocycloalkyl fused to the oxazole or thiazole ring; R6 = trihalomethyl, trihalomethoxy, (hydroxy)alkyl, alkylcarbamoyl, tetramethyldioxaborolanyl, halo, alkanoyl, carboxyalkoxy, (cyclo)alkoxy, tetrahydropyranyloxy, morpholinyl, or (un) substituted aryloxy, arylthio, heterocyclyloxy, pyridinyl, pyrimidinyl, pyrazinyl, or arylalkyl; R7 and R8 = independently H, CF3, or alkyl; R9 = (un)substituted (aryl)alkyl or alkenyl; R10 = H or alkyl; Q = a bond, O, or CH2; T1 = C or N; W = CH2, O, OCH2, S, SO2, or (un)substituted CONH, NH, or NHCH2; X = C, CH2C, or CCH2; Y and Z = independently O, N, or S wherein at least 1 of Y and Z = O or S; A = CO2H, alkylnitrile, CONH2, or (CH2)nCO2R19; n = 0-3; R19 = H or alkyl; and pharmaceutically acceptable salts thereof] were prepared as peroxisome proliferator activated receptor δ (PPAR δ) modulators (no data). For example, (4-mercapto-2-methylphenoxy) acetic acid Et ester was condensed with 1-[4-[2-(2-chloro-6-fluorophenyl)ethyl]-2-(4trifluoromethylphenyl)thiazol-5-yl]ethanol in the presence of PBu3 and 1,1'-(azodicarbonyl)bipiperidine in toluene. Deesterification with LiOH in THF produced II. I and their pharmaceutical compns. are useful for the prevention and or treatment of diabetes mellitus, syndrome X, and cardiovascular disease (no data).

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 18 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:454296 HCAPLUS Full-text

DOCUMENT NUMBER:

139:36527

TITLE:

Preparation of imidazolidinone derivatives as

peroxisome proliferator activated receptor agonists

INVENTOR(S):

Gibson, Tracey Ann; Johnston, Richard Duane; Mantlo, Nathan Bryan; Thompson, Richard Craig; Wang, Xiaodong; Winneroski, Leonard Larry,

Jr.; Xu, Yanping

PATENT ASSIGNEE(S):

SOURCE:

Eli Lilly and Company, USA

PCT Int. Appl., 408 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

Eligits

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	ENT	NO.			KIN)	DATE				ICAT:		10.		D <i>l</i>	ATE	
	2003												128		20	0021	L26
	₩:	AE, CO, GM, LS, PL, TZ, GH,	AG, CR, HR, LT, PT, UA, GM,	AL, CU, HU, LU, RO, UG, KE,	AM, CZ, ID, LV, RU, US, LS,	AT, DE, IL, MA, SC, UZ, MW,	AU, DK, IN, MD, SD, VC, MZ, TM,	AZ, DM, IS, MG, SE, VN, SD,	DZ, JP, MK, SG, YU, SL,	EC, KE, MN, SI, ZA, SZ,	EE, KG, MW, SK, ZM, TZ,	ES, KP, MX, SL, ZW UG,	FI, KR, MZ, TJ,	GB, KZ, NO, TM,	GD, LC, NZ, TN,	GE, LK, OM, TR,	GH, LR, PH, TT,
ΑU	2468 2002	FI, CG, 846 3569	FR, CI, 27	GB, CM,	GR, GA, A1 A1	ΪΕ, GN,	IT, GQ, 2003 2003	LU, GW, 0612 0617	MC, ML,	NL, MR, CA 20 AU 20	PT, NE, 002-	SE, SN, 24688 3569	SK, TD, 846 27	TR, TG	BF,	BJ, 0021: 0021:	CF, 126 126
BR CN	P 1453811 R: AT, BE, C IE, SI, L R 2002014437 N 1582279 U 200402486				DE, LV, A A	DK, FI,	ES, RO, 2004 2005	FR, MK, 1013 0216	GB, CY,	GR, AL, BR 2 CN 2	IT, TR, 002-	LI, BG, 1443 8238	LU, CZ, 7	NL, EE,	SE, SK 2	MC, 0021	PT, 126 126

JP 2005517643	Т	20050616	JP	2003-549322		20021126
NZ 532909	Α	20060831	NZ	2002-532909		20021126
US 2005020652	A1	20050127	US	2004-496770		20040525
ZA 2004004173	Α	20050823	ZA	2004-4173		20040527
IN 2004KN00716	Α	20061110	IN	2004-KN716		20040527
NO 2004002737	Α	20040817	NO	2004-2737		20040629
PRIORITY APPLN. INFO.:			US	2001-334453P	P	20011130
			WO	2002-US36128	W	20021126

OTHER SOURCE(S):

MARPAT 139:36527

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$$\begin{array}{c|c} E \\ Y \\ \hline \\ R9 \\ \hline \\ R22 \\ R22 \\ R2 \end{array}$$

The present invention is directed to compds. represented by the following AΒ structural Formula (I) [wherein R1 = H, each (un) substituted C1-C8 alkyl, aryl-C0-4-alkyl, heteroaryl-C0-4-alkyl, C3-6 cycloalkylaryl-C0-2-alkyl, or CH2-C(O)-R17-R18 (wherein R17 = O, NH; R18 = optionally substituted benzyl); R2 = C1-6 alkyl, C1-6 alkenyl, aryl-C0-4-alkyl, heteroaryl-C0-4-alkyl, C1-4alkylsulfonamide, C1-4 alkylamide, OH, C1-4 alkoxy, C3-6 cycloalkyl; W = O, S; X = an optionally substituted C1-5 alkylene linker wherein one carbon atom of the linker may optionally be replaced with O, NH, S, and optionally two carbons together may form a double bond; Y = C, O, S, NH, a single bond; E = C(R3)(R4)A, A, (CH2)nCO2R19; wherein A = CO2H, C1-3 alkylnitrile, carboxamide, each (un) substituted sulfonamide, acylsulfonamide, tetrazole, or isoxazole; R3 = H, C1-5 alkyl, C1-5 alkoxy; R4 = H, halo, each (un) substituted C1-5 alkyl, C1-5 alkoxy, C3-6 cycloalkyl, aryl-C0-4-alkyl, aryl-C0-2 alkoxy, or Ph; or R3 and R4 are combined to form a C3-8 cycloalkyl; R19 = H, each (un) substituted arylmethyl or C1-4 alkyl; n = 0-3; R21 = H, oxo, each (un)substituted C1-6alkyl, aryl, C1-4 alkylaryl, or heteroaryl; R22 = H, each (un)substituted C1-6 alkyl, aryl, C1-4 alkyl-aryl, or heteroaryl]. These compds. are useful for preventing or treating diabetes mellitus or treating syndrome X or cardiovascular disease (no data). Thus, To a solution of 2-methyl-2-[2methyl-4-[2-(3-methyl-2-oxoimidazolidin-4- yl)ethoxy]phenoxy]propionic acid Et ester (0.040 g) in DMF (2.0 mL), was added NaH (60% in mineral oil, 0.0066 g) in one portion and the mixture was stirred for 15 min at room temperature, treated with 4-tert-butylbenzyl bromide (0.030 mL), and stirred for 4 h at room temperature to give, after workup, an Et ester intermediate, which was treated with a mixture of MeOH (2 mL)/5.0 N NaOH (1 mL) at room temperature overnight, concentrated, diluted with water (2 mL), cooled down to 0°, and acidified to pH 2 by adding concentrated HCl dropwise to give, after purification on a Chem elut 1005 tube, 2-[4-[2-[1-(4-tert-Butylbenzyl)-3methyl-2-oxoimidazolidin-4-yl]ethoxy]-2- methylphenoxy]-2-methylpropionic acid as an colorless oil (0.022 g, 42%).

L23 ANSWER 19 OF 19 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2002:618214 HCAPLUS Full-text

TITLE: Synthesis and SAR studies toward a selective PPAR

α-Agonist

AUTHOR(S): Wang, Xiaodong; Barr, Robert J.; Bean, James S.; Kauffman, Raymond F.; Mayhugh, Daniel R.;

Montrose-Rafizadeh, Chahrzad; Renner, Joan; Saeed, Ashraf; Singh, Jaipal; Zink, Richard W.; Mantlo,

Nathan B.

CORPORATE SOURCE:

Lilly Research Laboratories, Eli Lilly and Company,

Indianapolis, IN, 46285, USA

SOURCE:

Abstracts of Papers, 224th ACS National Meeting, Boston, MA, United States, August 18-22, 2002 (2002), MEDI-363. American Chemical Society: Washington, D.

С.

CODEN: 69CZPZ

DOCUMENT TYPE:

Conference; Meeting Abstract

LANGUAGE:

English

Peroxisome Proliferator Activated Receptors (PPARs) are members of the nuclear hormone receptor super family. The PPAR alpha receptor subtype is reported to be activated by medium and long-chain fatty acids. Synthetic agonists include the fibrates, which elevate HDL-cholesterol and induce the expression of apoAI, a protein integral to the HDL-cholesterol particle. Activation of the PPAR alpha receptor is also involved in stimulating fatty acid beta-oxidation and produces a substantial reduction in plasma triglycerides. Herein we describe the discovery and synthesis of LY518674, a selective PPAR alpha agonist possessing activity in the 10-9 M range.

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